

# AMERICAN ARTISAN and Hardware Record

Vol. 81. No. 16.

620 SOUTH MICHIGAN AVENUE, CHICAGO, APRIL 16, 1921.

\$2.00 Per Year.

## FRONT RANK

TRADE NAME REGISTERED

THERE'S a family feeling between our dealers and us that you can't appreciate until you become one of us.

It's because they know that the Front Rank policy is to be absolutely fair and impartial to all.

It's because when they buy a Front Rank they know that their next-town neighbor, and every other dealer, when he buys one will pay exactly the same price.

It's because they know that if by some mistake the material they receive is not entirely satisfactory, all they have to do is tell us and we will cheerfully adjust matters.

It's because they know that the members of the organization are real, honest-to-goodness furnace men.

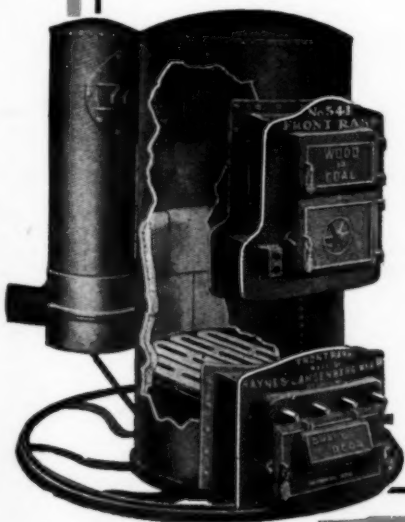
But, most of all, it's because they have absolute confidence in the Front Rank furnace, and know that once it is correctly put in, it stays in without any kicks or comebacks from the customer.

We're making a special Spring drive for new members of the family. Write us for full particulars.

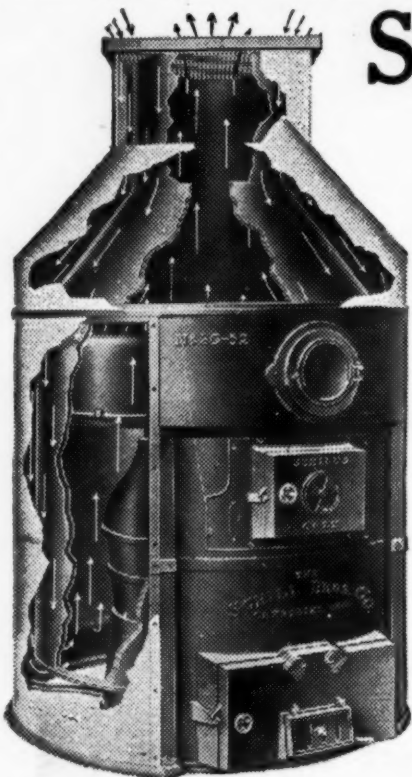
**Haynes-Langenberg Mfg. Co.**

4058 Forest Park Blvd.

St. Louis, Mo.



**DEALERS—Write today for details on**

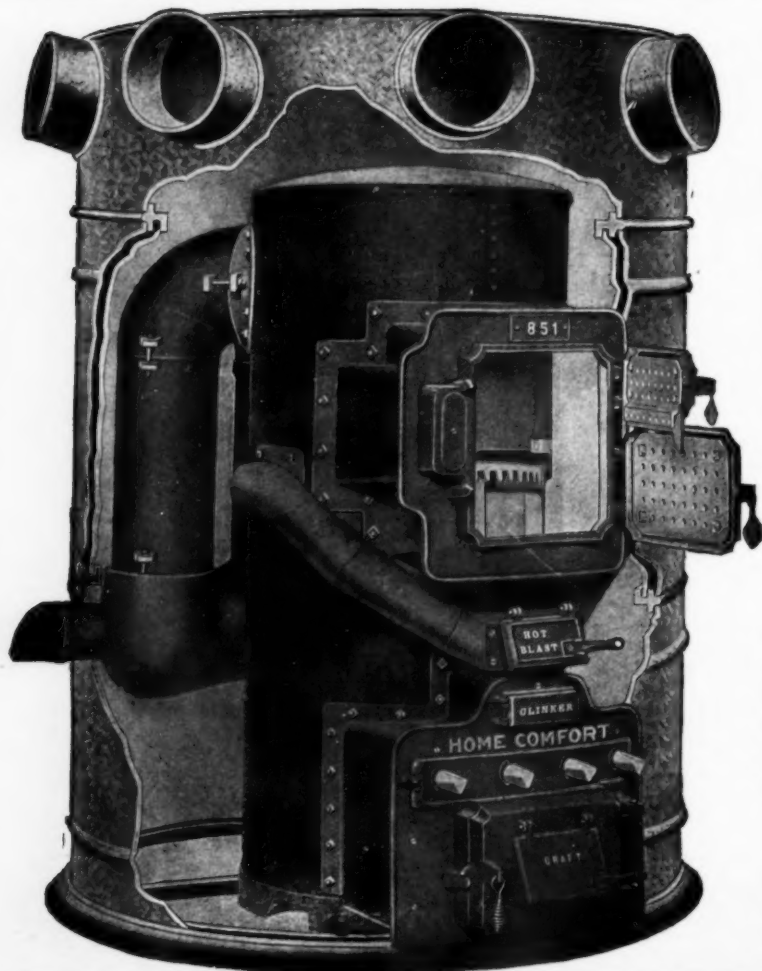


## SCHILL'S PIPELESS Warm Air Heater

This new idea is really an evolution in heating. Everywhere the popularity of the Pipeless Heater is increasing. You should not fail to get your share of this profitable business. Also you should not fail to handle a **good** Pipeless Heater. **SCHILL'S PIPELESS Warm Air Heater** is of the very best quality. It will burn hard and soft coal or wood. It is just the heater for moderate size homes, bungalows, churches, stores and other buildings. This heater is **guaranteed** so that you can assure your customers of complete satisfaction. Many testimonials from satisfied users testify to its true merit.

*Write now for full particulars.*

**THE SCHILL BROTHERS COMPANY**  
CRESTLINE, OHIO



## "HOME COMFORT"

**THERE ARE NO BETTER  
WARM AIR HEATERS**

**T**HE dealer who sells "Home Comfort" warm air heaters sells heaters that are not only exceptionally reliable but distinctively well made.

An examination of the ALL STEEL construction of "Home Comfort" warm air heaters will reveal to you an unusually well designed heating apparatus.

*For many years they have been  
real money makers*

The members of this new company are men who have been connected with the original makers for more than twenty years.

We have a splendid exclusive agency sales plan to offer you.

Let us tell you all about it.

*Write today for our catalog*

**ST. LOUIS HEATING CO.**  
2400-36 COLEMAN ST. ST. LOUIS, MO



FOUNDED 1880  
BY  
DANIEL STERN  
Thoroughly Covers  
The Hardware, Stove,  
Sheet Metal, and Warm  
Air Heating and Venti-  
lating Interests

# AMERICAN ARTISAN and Hardware Record

Address all communications and  
remittances to  
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AND  
HARDWARE RECORD  
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PUBLISHED EVERY SATURDAY BY ESTATE OF DANIEL STERN

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS (Invariably in Advance) ONE YEAR POSTAGE PAID \$2.00  
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There is in Washington at this time a very important question to be decided. Those of the old school of high protection maintain that a high prohibitive tariff must be established, or else we shall be flooded with imports of products made in Europe and Asia under wage and living conditions which are far below our standards.

## Taxes and the Tariff.

Another group maintains just as stoutly that we have passed the stage where we can afford to build a wall against the products of other countries, because in many lines we are now producing far more than we can use here, and that, therefore, we must knock for admission to the countries whose products those in the first group wish to exclude—which necessitates, they claim, a tariff law that will make it possible for these countries to sell their surplus merchandise in the United States.

Then we have those who say that a high protective tariff will not produce revenue, because if it "protects" American industries, there can be little or no imports on which to collect duty, and that, therefore, a high protective tariff means much higher prices to be paid by the consumer for many articles, but also much higher taxes.

"Protection," as we used to consider it in the days of McKinley, was more or less of a sectional issue. The manufacturers in the North and East were in favor of it, while the farmers in the West and South were against it—as a general proposition.

Today, the tariff question is, very largely, a matter of local issue. The sheep rancher in Montana wants "protection" against foreign wool, while the farmer in Minnesota is not so much interested in that feature, but wants to shut Canadian wheat out from competition. We had no tinplate industry to speak of before the McKinley tariff bill, and

few persons would today advise reducing the duty on this product—no matter how much of a "tariff-for-revenue-only" man he might be.

There was also a time when many acclaimed the idea of "indirect" taxation as the ideal method of raising funds for the operation of the Federal Government. We shall probably never return to that, and in one way at least it is a good thing, for most men are apt to want to know how their money is being spent if it is taken out of their pocket in good-sized lumps.

Of course, we have to pay as much toward the support of the Government, whether it be in the form of indirect taxation, such as Internal Revenue, Tariff Duties, or by direct payment in the shape of Income and Excess Profit Taxes

But if Uncle Sam tells you that in 1921 you will have to pay him a lump sum of, say, \$200, you are apt to take a little more interest in the manner in which Uncle Sam spends that \$200, than if he collects the same sum from you in little lumps by such means as three to five cents on a movie ticket or half a cent on a nickel cigar (if there is such a thing now).

And the more real interest the average man—who is you—takes in the operation of his government, the better will that government be.

♦ ♦ ♦ ♦ ♦

Nearly everyone knows that many fires can be prevented by taking enough precaution.

## Pay Cost of Fires

Comparatively few persons, however, realize the tremendous wastes of property which are constantly taking place in America as the result of fires that could have been prevented. Merely talking about the matter does not seem to be an effective mode of education. The city of Cincinnati has a

personal liability fire ordinance, which would be worth trying out in other cities of the United States. According to the provisions of this ordinance where fires are caused directly by carelessness or neglect, the persons held responsible for the fires must pay seventy-five dollars for the first hour and fifty dollars an hour beyond that time for each piece of apparatus used in putting out the blaze.

The hardware dealer or sheet metal contractor who has ever suffered business losses through fire will readily acknowledge the reasonableness and justice of such an ordinance. It will be noted that the Cincinnati ordinance does not limit responsibility for carelessness to the owner of the property. Any employee on the premises to whose negligence a fire is due can and ought to be held responsible and made to pay the penalty.

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If this entire page were printed in capital letters, you probably would not read more than half a dozen of its lines.

**All Capital  
Letters Are  
Hard to Read**

The reason is that you have been trained all your life to read sentences in which capital letters are used only to mark the beginning of the sentence or to emphasize the name of towns or persons and the like. An advertisement printed in all capital letters would affect you in pretty much the same way. Instinctively you would react against it, because it would put a strain upon your attention. It would break in upon the established habit of your eyes in reading continuous text.

Anything which slows down the interest of the people who look at your advertisement lessens the effect of your sales message. To that extent your advertisement loses power, just as electricity loses power to perform a given task when its pressure is reduced by being forced through a wire of insufficient diameter.

You may say that this item of capital letters is a small matter—not worth wasting the space of an editorial to discuss it. But it is precisely upon these apparently insignificant things that success or failure often hinges.

Type is the dress in which you send forth your appeal to prospective customers. People get their impression of your store and of its goods and personnel from the manner in

which you present your establishment to them in your advertisements.

It will be greatly to your advantage, therefore, to select plain, readable type for your copy and to have the words of your advertisement set in such a way as to put the least possible strain upon the eyes of the people to whom it is directed.

◆ ◆ ◆ ◆ ◆

The Educational Department of the American Washing Machine Manufacturers' Association has issued a series of six bulletins dealing with laundering at home.

**Bulletins  
for Study**

These publications cover practically every phase of washing machines and are of great help in the intelligent use of these devices. They explain such topics as removal of stains, supplies for the home laundry, washing woolens and silks, and equipment for washing.

The enterprising hardware dealer can easily increase the scope of his service to his customers by studying these bulletins. The knowledge thus derived will enable him not only to give greater satisfaction to his patrons but also to convince them of the need of purchasing many things which he carries in stock that are useful as part of the equipment for washing, such as ironing boards or tables, asbestos mats, iron holders, and the like.

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One does not need to be the seventh son of a seventh son to forecast with reasonable accuracy the favorable consequences of the reduction in

**Steel Prices  
and Business**

steel prices announced this week by the United States Steel Corporation. The immediate effect upon hardware products will not be as great as upon industry in general. The present stocks of hardware represent the higher costs involved in the old schedule of prices. Manifestly, therefore, the tendency will be to dispose of them at a level above the new rates. But the stimulus to business resulting from the stabilizing influence of the United States Steel Corporation's action will quicken demand for hardware and thus enable the dealers to split the difference between the old prices and the new—to the advantage of their customers and the speeding up of sales.



## Random Notes and Sketches

By Sidney Arnold

The superior male being who does not give women credit for cleverness will have a chance to revise his opinion when he reads the following story sent me by my friend H. G. Schwarzkopf, sales representative Durham Duplex Razor Company:

After being married about a year the young fellow started spending his evenings down town with the boys.

One evening his conscience smote him; he thought he would call his wife and have her come down town and have dinner with him. So he called her up.

"Hello, Kid," he began. "Say, slip on some glad rags and run down and meet me on the quiet. We'll have dinner and then paint the town a bright red. How about it?"

"I'll be delighted to join you Jack," was the reply, "but why not come out to the house and get me. There's nobody home!"

As her husband's name is Bill, he spends his evenings at home now, and Olive wears a queer smile when Bill is not looking at her.

\* \* \*

We were discussing odd happenings in court, and my friend J. E. Ellis, Secretary and Manager Independent Stove Company, Owosso, Michigan, told a laughable incident, as follows:

In Wyoming, court was held at a public ranch, and there was much noise and annoyance, when the judge, who could bear it no longer, arose and said:

"Order! I must have order. There have been two or three men convicted already, and the court has not heard a word of the evidence."

\* \* \*

There are many diversities of character among creditors, avers my friend, J. B. McCarroll of Ottumwa, Iowa, President Iowa Retail Hardware Association. Some of them are tender-hearted, as the one in this dialogue:

Brown—I don't see why you haggled so with the hardware man about the price—you'll never pay him.

Owens—Oh, but, you see, I am conscientious. I don't want the poor fellow to lose more than is necessary.

\* \* \*

You can not always be sure in advance of the impression you are going to make, says W. T. Strangward, General Manager Forest City Foundry Company, Cleveland, Ohio. He offers this illustration:

After the end of the trial, at which the prisoner was convicted of burglary, a friend met his lawyer outside and commiserated with him.

"I can't understand it," said the friend. "You made a wonderful speech for the defense, and yet the jury brought him in guilty."

"I thought I'd done pretty well," confessed the lawyer, "but one of the jurymen explained it to me. While they were out of court making up their minds they discussed that speech, and decided that my client must be guilty, or else he wouldn't have thought it necessary to employ so expensive a barrister!"

Harry W. Neal of Hall-Neal Furnace Company, Indianapolis, Indiana, says that loyalty is of first importance. He tells this story as an extreme example of it:

Jenkins, a newly wedded suburbanite, kissed his wife good-bye the other morning and, telling her he would be home at six o'clock in the evening, got into his auto and started for town.

At six o'clock no hubby had appeared, and the little wife began to get nervous.

When the hour of midnight arrived, she could bear the suspense no longer, so she aroused her father and sent him off to the telegraph office with six telegrams to as many brother Elks living in town, asking each if her husband was stopping with him over night.

Morning came, and the frantic wife had received no intelligence of the missing man.

As dawn appeared, a farm wagon containing a farmer and the derelict husband drove up to the house, while behind the wagon came the broken-down auto.

Almost simultaneously came a messenger boy with an answer to one of the telegrams, followed at intervals by five others. All of them read:

"Yes, John is spending the night with me."

\* \* \*

It is not always an easy thing to fathom motives.

Frank E. Ederle, Secretary Michigan Sheet Metal Contractors' Association, tells about a case in which the neighbors petitioned the City Council to have a light placed in front of a certain house.

The man who lives in the house was asked what he thought about it. He replied:

"I'm puzzled. I don't know whether it is kindness on the part of my neighbors so that I can find the key-hole, or just plain curiosity to see what time I come home nights."

\* \* \*

Here is a conversation overheard in the lobby of a Detroit Hotel by my friend, N. L. Pierson, Jr., President Michigan Traveling Salesmen's Auxiliary:

"Hello Dotty! What are you doing these days?"

"Same old thing."

"Are you really? I thought he went to Europe."

\* \* \*

If you had a penny for every word which has been written about friendship, you would be so rich that you would have a hard time to gain any genuine friends.

As I understand friendship, it means a fellowship of ideals, sympathies, and appreciations.

It does not include the selfish element of seeking personal advantage, although it implies a readiness to help at all times.

### Fair Weather Friends.

When things have got to comin' as a fellow wants 'em to. When his pockets are all bulgin' and his clo's are fine and new;

When he steps out proud and lordly and ain't got a thing to fear,

There's a sudden change comes over folks that used to wink and sneer;

They come runnin' then to tell you that they're all your friends, and say

That they're always been dead anxious for to help you out some way—

Yes, indeed!

Friends are always mighty plentiful when friends ain't what you need.

## *This Is How They Sell Kitchen Ranges by Carload In the State of Washington.*

*The Grote-Rankin Company, Seattle, Sold 104 Monarch Malleable Ranges in Six Days During February, 1921.*

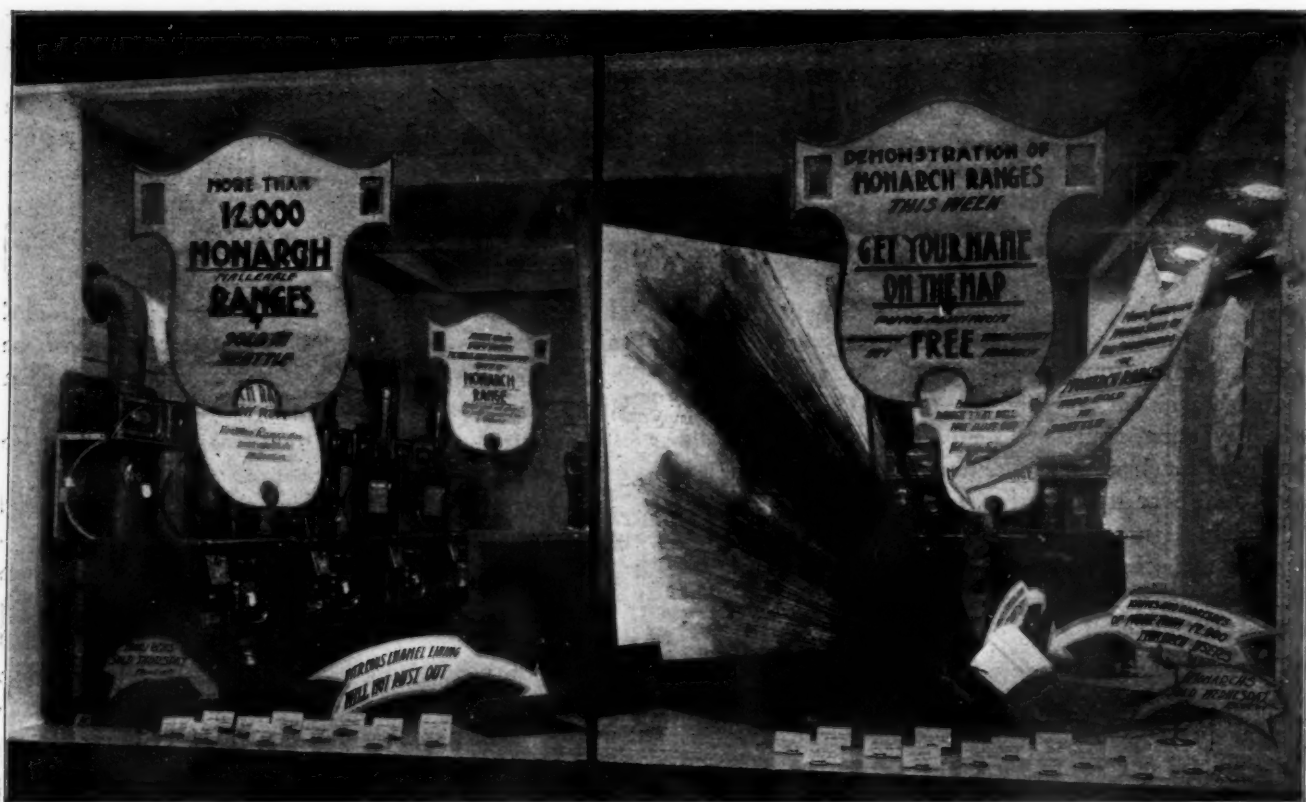
There are those who say that kitchen ranges are not moving this season—that farmers won't buy them—that city folk won't buy them—that nobody is inclined to spend money for ranges.

That may be true in some cases, but every little while information comes to us which contradicts this statement: In some cases the merchant is located in farming communities; in others it is from industrial centers.

Grote-Rankin Company, Seattle, Washington:

"We have just completed one of the best demonstrations and sales of Monarch Malleable Ranges that we have ever had—best from the greatest average of sales per day for the time the demonstration was in progress; best from the manner in which the advertising and window displays were made to produce results.

"For the window display, we worked not an alto-



Window Display Used in Connection with Special Demonstration Sale of Monarch Malleable Ranges Arranged for the Grote-Rankin Company, Seattle, Washington.

As a matter of fact—stoves are selling where the hardware dealer goes after the business in an aggressive and intelligent manner.

In Sylvania, Ohio, The Chandler Hardware Company sold twelve Majestic malleable ranges of a well known make during six days in February—a town of less than 2,000 people, only eleven miles from Toledo.

In Whitestown, Indiana, the Whitestown Hardware Company sold eighteen copper-clad ranges, also malleable, in the first week of December, 1920—a town of 600 population. In Seattle, Washington, the Grote-Rankin Company sold 104 Monarch Malleable Ranges in six days during the latter part of February, 1921.

These are just scattering examples of what can be done—in strictly agricultural sections, as well as in industrial centers—by putting a bit of thought on a selling plan and push into the salesforce.

Here is the way they do it on the Pacific Coast, as told by R. A. Cibulka, Advertising Manager of the

gether original idea, but nevertheless it brought the local Monarch business forcibly before our patrons. It showed exactly where the thousands of Monarchs sold in Seattle are located.

"We used a map of Greater Seattle, some eight by ten feet in size. This map we framed and backed up with boards, as shown in the accompanying illustration, driving a tack into the blocks wherever Monarchs were sold, and we used more than five thousand threads, running from the locations to a central point, where we had placed a book with all the Monarch users—more than 12,000.

"Large arrows explained in detail what all the threads meant. Other arrows brought out the exclusive Monarch features.

"The corner window used for this display was twenty feet square, and was lighted by a battery of flickering spotlights, focussed upon the map and other important parts of the display.



"These lights were constantly shifting, and their brilliancy, together with the continual movement made the display especially noticeable.

"While the newspaper space was along the lines used in previous demonstrations, we strengthened our publicity by sending out letters to prospects announcing the demonstration, and followed up these letters with personal calls by competent salesmen. For this purpose we used one of our cars to facilitate matters and get in touch with as many as possible.

"As the demonstration progressed, we displayed names and addresses on neat cards with arrows announcing the daily sales. These cards appear in the foreground of the window.

"Altogether 84 sales were closed in 6 days, and 20 other sales were closed, directly attributed to our Demonstration Week."

### **Art Stove Company Issues a Beautiful Catalogue.**

Justifying its right to the suggestion of artistry in the name of the corporation, The Art Stove Company, Detroit, Michigan, has just issued an unusually artistic catalogue of its products.

This sumptuous publication features the company's standard "Laurel" line of stoves, ranges, and warm air heaters.

The cover is printed in three colors on a heavy grey stock, producing a rich tonal effect.

The pages of the book, which measure twelve by nine inches, are liberally illustrated, several of them being in two colors.

The descriptions are set forth in very readable type, care having been taken to select letters of a size which put no strain upon the eye.

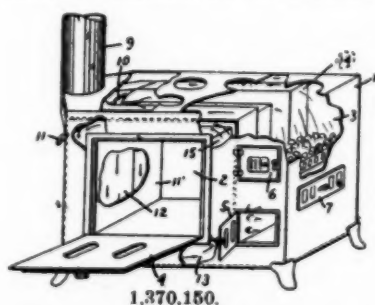
With a catalogue of this kind on his show case, the hardware or stove dealer has a silent salesman working for him. Customers attracted by the beautiful cover of the catalogue are sure to open it and to look at the many artistic illustrations.

In this way desire is created and much of the preliminary work done for the stove salesman.

Copies of this beautiful catalogue can be obtained by writing to the Art Stove Company, Detroit, Michigan.

### **Gets United States Patent Rights for Stove.**

Under number 1,370,150, United States patent rights have been granted to Henry Podolsky, San Francisco, California, for a stove described herewith:



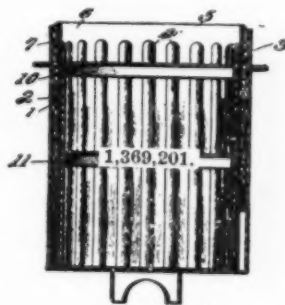
and across the bottom of the oven, two other flues connecting the bottom flue with the chimney and extend-

A stove having a fire box, an oven formed therein, partitions in the stove forming a central flue with its bottom formed by the top of the oven and extending entirely across one end of the oven

ing across one end of the oven adjacent the fire box and over the top of the oven from front to rear and communicating directly with the chimney, one of said flues on each side of the central flue, the top of the stove being spaced away from the two latter flues sufficiently to allow the heat from the fire box to pass over the top of the oven and flues, across the entire width of the stove, and a damper to permit the smoke to pass directly to the chimney after passing through the central flue.

### **Obtains Patent Rights for Oil Stove Wick Tube.**

Under number 1,369,201, United States patent rights have been granted to Louis Stockstrom, St. Louis, Missouri, assignor to American Stove Company, St. Louis, Missouri, a corporation of New Jersey, for an oil stove wick tube described herewith:



In a wick burner, inner and outer wick tubes, a wick between the tubes and resting against the outer wick tube, the inner wick tube having inwardly extending longitudinal corrugations beginning at points below the upper end of the inner wick tube, whereby the upper end of the wick

is in engagement with the upper ends of both the inner and outer wick tubes, the inwardly extending corrugations forming spaces in which foreign matter may collect, for the purpose described.

### **Celebrates Golden Wedding.**

Fifty years of happy married life were fittingly celebrated by Mr. and Mrs. William Thomson, 210 South 11th Street, Philadelphia, Pennsylvania, on the occasion of their golden wedding anniversary, April 13th.

They were married in Philadelphia on April 13, 1871. Mr. Thomson, who is still active in business despite his eighty-two years, has been for more than half a century at the head of the Reading Stove Works at 64-66 North 2d Street, Philadelphia.

They have three children, Mrs. Robert S. Riggs, of Narberth; Frederick W. and Jesse O. Thomson, both of Philadelphia, who with Mr. and Mrs. Thomson's two grandchildren, were present at a family party on the anniversary.

Mr. Thomson is a member of the Knights Templar and of the Mystic Shrine.

### **Trade-Mark Is Registered for Stove Pipes and Elbows.**

Hemp and Company, St. Louis, Missouri, have procured United States Patent Office registration, under number 126,217, for the trade-mark reproduced herewith. The particular description of goods to which it applies is stovepipes and stove pipe elbows.

The Company claims use since about the first day of December, 1897.

**DUPLEX**  
126,217.

# Lerch Knows How to Sell What He Carries in His Stock of Hardware.

*How Davenport, Iowa, Retail Hardware Dealer Makes Sales Under Difficult Circumstances.*

I was in Davenport, Iowa, recently and had occasion to visit the retail hardware store of A. J. Lerch on the main thoroughfare of that city—Third Street.

Mr. Lerch was alone in the store at the time, and our conversation was interrupted by six persons who came in to buy various articles, so I improved the opportunity to watch his method of handling customers, and, to say the least, he certainly showed himself resourceful in a high degree.

The first customer wanted a small stationary wrench to fit a brass nut about  $\frac{5}{8}$  inch square. Lerch was "out" of the size, so he drew out an adjustable "S" wrench, when the workman said: "I don't want that kind, it won't go in where I have to use it."

Lerch was almost ready to let him go, when he thought of a combination set of stamped steel wrenches; showing it to the customer he said: "If you have to use it in a small space, this set ought to be just the thing for you, and there are eight different sizes of nuts that you can fit with this set. The price is only \$1.00."

The workman remarked: "That is just what I want. I had a set of 'So-and-So's' wrenches stolen from me that cost me \$3.50. If somebody steals this, I won't be out more than a dollar any way."

So the sale was made; the customer went away satisfied, and a dollar had been put into the cash register instead of 35 cents.

The next customer wanted a flashlight battery of a certain make, which has been advertised strongly in the general publicity magazines. This brand was not in stock, nor was the size (a two-cell battery was wanted).

The dealer tried a three-cell battery, but no light came, although the battery showed action in the tester. It was then noticed that the filament in the little bulb was broken, and a new bulb was inserted, but still the battery did not work, so Mr. Lerch took the light apart and found that there was something wrong with the contact points; it was clear to him that the flashlight was altogether out of commission, but the important thing to do was to convince the woman that even if she did secure the kind and size of battery that she had asked for, the flashlight would not operate.

This he proceeded to demonstrate by taking one of his own lights apart and showing her just how the contacts were made and what was necessary in order to get a light. The woman finally concluded by purchasing the flashlight he had used for demonstration.

The third sale was made to a man who had bought a stove. He was "sore" because the furniture man who had sold him the stove had failed to furnish an elbow and piece of galvanized pipe to fit into the chimney, although he had agreed to do so when the sale was made and the money paid.

Mr. Lerch had the elbow in stock, but had to make the galvanized "sleeve" for the chimney, and while the sheet metal worker in his shop did this, he improved the opportunity by pointing out that a coal scuttle and an ash sifter would be handy things to have around. Result: Two other items added to the sale, and two less to count in the inventory.

During the forty-five minutes I was in this store, Mr. Lerch made six sales, and in only two cases did the customer ask for the particular item that he or she finally bought. In the other four cases, the dealer had to find something that would fill the purpose as well as the article asked for, but which was not in stock, thereby proving that he knew his stock; that he was an exceptional salesman, and that people had confidence in him. Otherwise, for instance, the

woman cited in the second example would hardly have taken his statement as to the condition of her own flashlight without at least making an effort at some other store to secure the battery she had in mind to buy.

Here is another example of good salesmanship: It comes from Princeton, Illinois, where Howard Priestley is in the hardware business.

A farmer wanted to buy a stove and was "waited on" by one of the salesmen, who finally gave him up as a bad job, because although the man appeared to like the stove that the salesman had tried to sell him, he kept on telling him that he could buy one from a mail order house in Chicago at twenty dollars less—"and it was just as good as that one; weighed just as much and had a cabinet and water reservoir like Priestley's."

## LERCH'S SELLING RULES

1. Sell what you have in stock.
2. A satisfied customer is the best advertising medium for you, just as a dissatisfied customer is the best advertising medium against you.
3. Be sure that your customer is thoroughly satisfied with his purchase before you let him leave your store.
4. If your customer feels later on that he has a reason for dissatisfaction with whatever you may have sold him, his word is better than yours in the settlement.
5. Know what you have in stock and have it where you can quickly put your hands on it whenever necessary. Sales are often lost because of disorderly kept stock.



He would, however, buy if they would take off half of the difference, but Mr. Priestley to whom the matter was referred said that he had only one price, and that it was as low as he could afford to sell the stove for.

After a good deal of talking on the part of the farmer and very little on the part of Mr. Priestley, the latter finally said: Now, see here, John. You have known me for a good many years, and you ought to know by this time that when I say a thing, I mean it. This is my price, and this stove is worth every cent of it. If you buy it, you will have an excellent stove; you can take it right away with you and the Missus can use it to cook your dinner with tomorrow. If in ten years you should need a repair part for the grate you can get it right here, without delay.

"If you decide to buy the mail order stove you may get a fairly good value. I am not saying anything as to that, but it will not be worth as much as this stove; it will take you quite some time to get it, and in the meantime the Missus will have to keep on cooking on the old one. And then—when something needs repair you will have to wait for it a considerable time, for small freight packages do not travel very fast.

Still, the farmer seemed undecided, so Priestley clinched the sale with this remark:

"All right, John, go ahead and buy the other stove, but keep this in mind that whenever you need anything in a hurry and it is in my line, you will always be able to secure it right away."

Mr. Farmer said nothing, but peeled off a hundred dollar bill and several smaller denominations of Uncle Sam's green-backed paper money, and in a few minutes went away with the stove in the back part of his wagon.

### ***Zinc in Paint Increases Its Protective Qualities.***

"Save the Surface" is a slogan which has become pretty well impressed upon the minds of our thinking people during the last year and a half, says C. A. Stedman, a New York authority on zinc and its uses.

It was born of an idea—a great idea—that of preventing property depreciation via the surface route.

Premature decomposition of surfaces is the dilemma which "save the surface" seeks to avoid. When this campaign to protect surfaces was projected, it was pointed out that about three times as many dollars in property losses were incurred each year in the United States from preventable decay as from fire; and yet the amount paid in premiums for protection against fire exceeded the amount paid for protection against decay (paint purchases) in about the same proportion.

Manifestly, the "save the surface" argument is sound. It is economic. In these post-war days when property owners are beginning to feel the burden of decreased profits, a prescription for saving the surface is distinctly acceptable.

But—

How best to do the job! The subject reverts to a discussion of quality paints, since the preferred prescription that is to cure the patient must contain efficacious medicine.

Now, coming down to greater detail, we find that

those paints containing liberal quantities of zinc oxide are the indicated medicines. And venturing onto the technical, we reason that zinc oxide, being of extremely fine particle size, when mixed with the proper oil, penetrates into the minute pores of the surface. This assures firm anchorage and furnishes protection to that surface against the elements, the agency that destroys.

This discussion does not contemplate the use of zinc oxide to the exclusion of other materials. It urges only a partnership between zinc and other properly selected pigments. As the physician and the nurse operate in the treatment of their sick patient, so does each pigment have certain duties to perform in its fight against an unseen, inanimate foe.

One of the foremost master painters of this country has said of zinc: "Zinc is the reinforcing element that overcomes the weak points of lead. The two, in combination, form the ideal paint film."

But the industry progresses. Other useful pigments are in the field and appear to be seeking their place in paint mixtures. Among these is light-resisting lithopone. Indeed, in certain European countries where lead is taboo, lithopone and zinc oxide work harmoniously and satisfactorily as a paint film. Meantime, development work goes on apace in the United States.

Speaking of zinc, used for exterior and interior painting the world over, some of its functions when used in paint are these:

1. It retards chalking;
2. Reduces fading or discoloration;
3. Insures smooth clean surface;
4. Imparts permanence, or durability, to the coating.

So, it is seen that when quality paints are prescribed to "doctor" up the residence, barn, silo, hen-coop or other urban, suburban or rural edifice it may be regarded as certain that not the least important of the ingredients contained is zinc oxide, not always heard about but a factor not to be overlooked in the campaign being waged against the ravages of time and weather.

### ***Gets Trade-Mark Registered in Patent Office.***

The Gairing Tool Company, Detroit, Michigan, has obtained United States Patent Office registration, under number 133,208, for the trade-mark shown herewith. No claim is made to the use of the word "Detroit" or to the representation of the reamer appearing in the mark apart from the mark as shown in the drawing.

The particular description of goods to which it applies is metal boring tools, counterbores, countersinks, pilots, counterbore sets, spot facers, reamers, milling cutters, hollow mills, taps, sockets, coils, end mills, shanks, drills, arbors, tapping attachments, angular cutters, inserted tool cutters, mandrels, sleeves. The Company claims use since April 1, 1919.



Do you study the arrangement of the stock in the store and plan how it can be changed to advantage and to bring stock closer to the eye of the buyer?

# Good Ideas for Window Display

*Practical Lessons from Exhibits in AMERICAN ARTISAN  
AND HARDWARE RECORD Window Display Competition.  
How to Get More Passers-By to Come into Your Store.*

## WINDOW DISPLAY FEATURES LABOR-SAVING ARTICLES.

Although no statistics are available on the matter, it is a safe assertion to make that the question most often asked by housewives is:

"Where does all the dirt come from?"

When you are outdoors walking through the park or looking at the pleasing green of the trees, or disporting yourself on the meadows or enjoying the exercise of rowing along a river, you do not realize how much dirt you are picking up as you go along.

Not only carpenters and machinists and blacksmiths, but stenographers, filing clerks, salesmen, bookkeepers, and persons engaged in apparently clean occupations

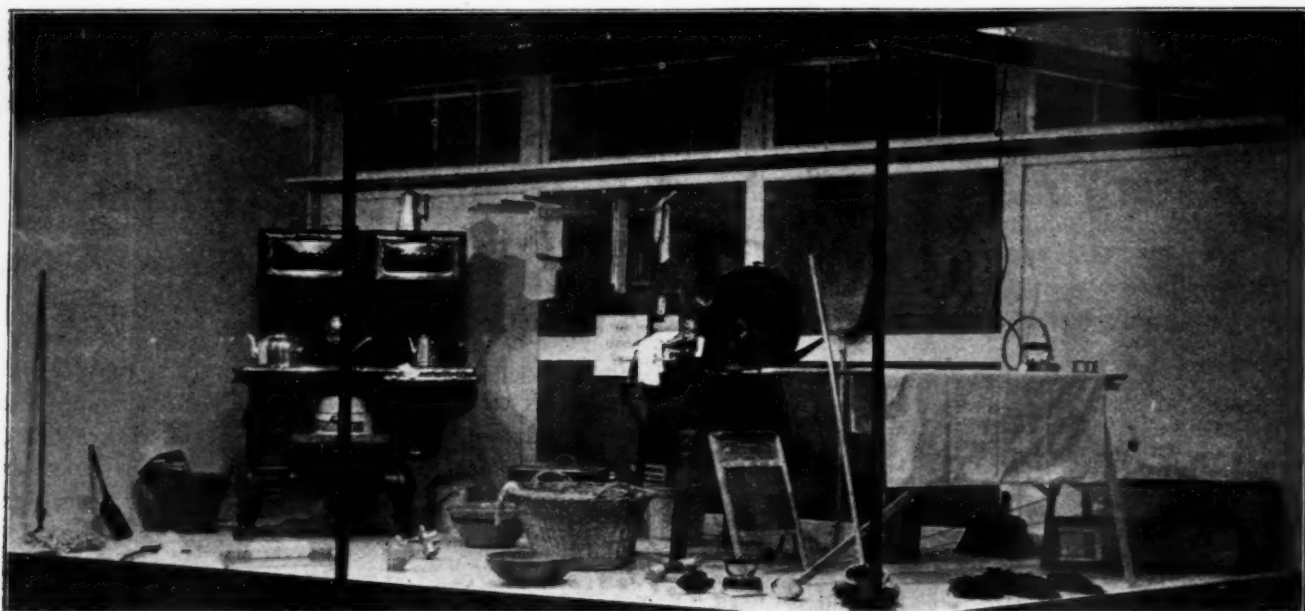
Back of the window display shown in the accompanying illustration is the power of this psychology. It presents the idea of labor-saving in the home. It offers mechanism for easing the necessary work of getting rid of the dirt and dust and grime.

This window display was planned and arranged by George C. Franklin, for Smith Hardware Company, Oswego, New York.

Mr. Franklin says that the main thought which he tried to convey in this exhibit was: "Ladies, these are things to lighten your household duties."

He describes the display briefly as follows:

"The stove, washing machine, ironing board, etc., were arranged to give an appearance of a kitchen with



Window Exhibit of Kitchen and Laundry Furnishings Arranged and Designed by George C. Franklin, for Smith Hardware Company, Oswego, New York.

accumulate dirt and dust in their clothes, bring it into the house on their shoes, etc., etc., and thus it comes to pass that keeping a house clean is a big task. There is a good deal of drudgery connected with it.

The old-fashioned woman of two or three generations ago used to believe that it was right and proper for her to undergo the drudgery without complaint, that it was a woman's duty, that she would be richly awarded in another world, etc.

But the woman of today is more enlightened.

She objects to being a kitchen slave. She is determined to enjoy life.

She shrinks from the drudgery of constant labor to keep a house clean.

It is in response to the necessity thus developed by the revolt of women against the drudgery of other generations that labor-saving devices have been invented and are sold in increasing quantities.

these articles in use. On the floor were placed some kitchen tools such as a rolling pin and board, chopping bowl and knife, food chopper, clothes line, dust mops.

"The mops, stove shovel, broom, dust pan, etc., were placed against the wall. The clothes bars are open and some clothes hung on them while on the ironing board is a sheet with the electric iron doing its bit. The card reads 'Save Money,' 'Let us Equip Your Kitchen.'"

Results—not ownership—Determine a purchase's value. They do not Show themselves at the time of purchase, but they Prove Themselves after.

People who buy are always Comparing their Purchase with their Money—they give their dollars Excessive importance. Set your purchase Beside your dollar—your Viewpoint is Better.



### Offers Practical Suggestions to Hardware Dealers.

Distinctive because of its practical service to the organization is *The Members' Exchange* of the Wisconsin Retail Hardware Association. Under the heading, "Business Kinks," a recent issue of this bulletin gives the following helpful hints:

The time to use your want book is when you have about a week's supply of any item of merchandise left on hand. But if you have not acquired the habit of sending in orders by mail, and feel that you must hold them 'till the salesman comes then it may be well to enter up your "wants" two weeks previous to the time when you expect to be all sold out.

And here is the point. When making the entry on the want book, write the cost price in characters as found on the goods after the name.

This will enable you immediately to check the salesman's quotation when buying, without reference to your cost price book.

Another want book-kink is this: When writing up an article which you are entirely sold out of, put the name of the party inquiring and his 'phone number immediately below the item. 'Phone him at once as soon as the goods are back in stock.

No doubt you have two show windows. When trimming them make it a rule to make one of them appeal to the men, the other to the women.

Do not change both show windows at the same time. Try changing one window on Tuesday, the other on Thursday. If employing two or more clerks, place one in charge of each window. You will see good results come from this arrangement.

Little articles sell mostly on Saturdays, and big things on Mondays. Be guided by this in putting on special sales.

When putting away winter goods that are out of season be sure and wrap them up or otherwise protect them through the summer so that they will come back on your shelves looking fresh and salable.

A good size for show cards is 10 inches by 14 inches. Do not put more than eight words on a card. Make letters 3 inch.

Cultivate the young boys and girls and their trade. Try giving a mitt or glove as a prize to the boy who can throw a base ball the farthest. Hold contests in front of your store and be sure your windows feature base ball goods in the very best shape.

### Various Hardware Trade-Marks Are Granted Registration.

United States Patent Office registration has been granted for the trade-marks depicted in the accompanying illustration. The numbers of the trade-mark certificates are given in connection with the list printed herewith together with the names of the companies and the character of the goods for which each trade-mark is to be used.

140,289. Washboilers. Nichthausen and Levy, Brooklyn, New York. Filed February 24, 1920.

140,257. Boring drills, screwdrivers, and valve grinders. The Black and Decker Manufacturing Company, Baltimore, Maryland. Filed November 24, 1920.

140,290. Copper and block tin washboilers. Nich-

thausen and Levy, Brooklyn, New York. Filed February 24, 1920.

140,507. Box openers, glass cutters, nail pullers, and nail puller combination tools. Smith and Hemenway

# STANDARD

140,289.

## PISTOL GRIP & TRIGGER SWITCH

140,257.

## QUALITY

140,290.

## ECLIPSE

140,507.

## INDIAN

140,508.

## VIMCO

140,414

## AMERICAN

140,253.

## Clarinda

140,263.



125,498.

## "PITTSBURGH PERFECT"

140,293.

Company, Incorporated, New York City, and Irvington, New Jersey. Filed December 1, 1920.

140,506. Box openers, glass cutters, nail pullers, and nail puller combination tools. Smith and Hemenway Company, Incorporated, New York City, and Irvington, New Jersey. Filed December 1, 1920.

140,414. Wrenches. Victor Manufacturing Company, Dayton, Ohio. Filed November 29, 1920.

140,253. Lathes, planers, shapers, and radial drills. The American Tool Works Company, Cincinnati, Ohio. Filed October 30, 1920.

140,263. Laundry washing machines and wringers, both hand and power. Clarinda Lawn Mower Company, Clarinda, Iowa. Filed September 23, 1920.

125,498. Hammers, sledges, screwdrivers, trowels, pliers, vises, wrenches, garden forks, rakes, hoes, shovels, spades, mattocks, picks, files, crowbars, axes, hatchets, chisels, saws, drills, bit braces, planers, draw knives, files, auger bits, lawn mowers, hay carriers, sewing machines. Hall Hardware Company, Minneapolis, Minnesota. Filed December 2, 1919.

140,293. Wire nails, coated nails, barbwire, staples, bale ties, wire fencing. Pittsburgh Steel Company, Pittsburgh, Pennsylvania. Filed July 10, 1920.

### Wants Present Address of Federal Tool and Supply Company.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

I should like to know the present address of the Federal Tool and Supply Company, formerly located at 409 North Third Street, St. Louis.

Yours truly,

A. E. BROWDER,

Albion, Nebraska, April 8, 1921.

Dollars must Serve or Deceive.

## Will Farmers Buy Fencing and Implements When Wheat and Corn Prices Are Down?

*Aid, of West Plains, Missouri, Says That They Will, Provided You Go After the Business as if You Mean to Get It.*

Will farmers buy fencing, plows and other implements when wheat and corn prices are 'way down, as they are now, in comparison with 1917?

Will their wives buy dry goods?

Will their wives buy aluminumware?

Will the farmers buy tools and automobile accessories?

You may think that they will not.

But C. T. Aid, of the Aid Hardware Company, West Plains, Missouri, says that they will—

And he knows what he is talking about, for he had

And the farmers came—for three reasons:

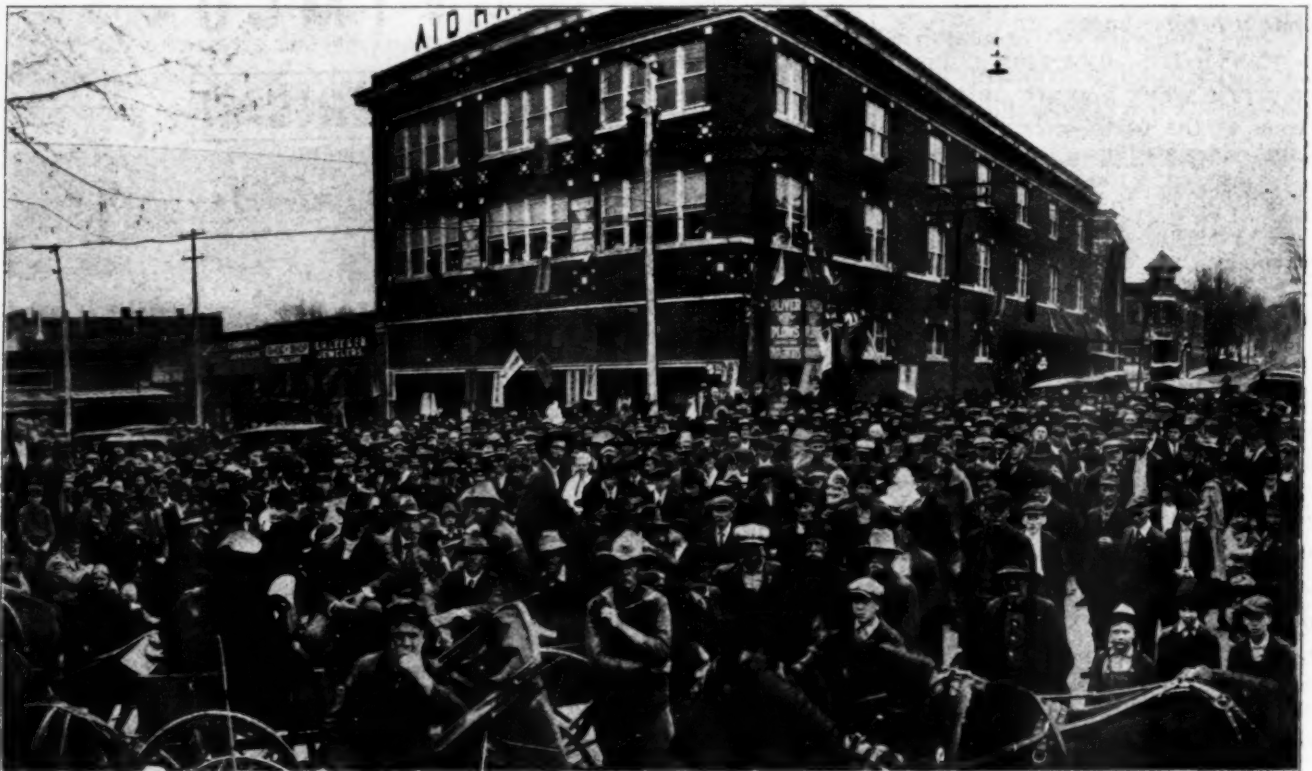
(1) Because they had confidence in Mr. Aid from past experience.

(2) Because he advertised in his customary, vigorous manner, offering special bargains.

(3) Because they needed the goods that he advertised.

There were 3,600 registered at the store of the Aid Hardware Company during the two days—600 more than in 1920.

In spite of the fact that it rained hard Friday and



Portion of the 3,600 Farmers Who With Their Families Attended the Eleventh Annual Plow and Fence Day of the Aid Hardware Company, March 11th and 12th, 1921, at West Plains, Missouri.

the biggest sale of these articles in the history of his store on Friday and Saturday, March 11th and 12th, in a town of 3,500 inhabitants and situated in a section which is distinctively and exclusively agricultural.

Of course, Mr. Aid believes in advertising. In fact, he knows that *advertising pays him*, just as it pays Pickering's in Cincinnati, as it pays Gross' in Milwaukee, as it pays Kusel's in Watertown, Wisconsin, as it pays Abbott's in Marshalltown, Iowa, as it pays hundreds of other progressive hardware dealers—and as it pays the retail mail order houses.

That has quite a good deal to do with his successful sale and with the fact that his business is showing a marked increase over that of 1920.

Take a look at the picture shown in this page.

It looks as if there was a crowd in town on that day, doesn't it?

Friday night, thus making traveling disagreeable and difficult.

And all the other stores in town reported additional business.

A full page announcement was run in the two local newspapers and reprints were mailed to farmers and others within thirty miles. This advertisement called attention to the "Eleventh Annual Oliver Plow and American Fence Day," as well as to a "Dollar Day Sale" on the two days mentioned.

On this page there were fifty-three special one-dollar values offered, of which eleven were from the hardware department, the remainder pertaining to groceries, dry goods, clothing, etc., each one being a real bargain, such as gallon size aluminum kettles, galvanized wash tubs, quart cans of varnish, aluminum coffee percolators, etc.



At noon, long tables were in readiness in the Company's warehouse, where hot biscuits, coffee and cakes were served free and a big, good-humored crowd sat down to a picnic lunch. The biscuits were donated by a local milling company and the cakes had been entered in a cake baking contest, which is a regular feature of this annual event. More than six thousand of the biscuits were eaten; fifty cakes were divided up and disappeared; twelve large wash boilers of coffee helped to wash down the lunch.

As each person registered at the store, a ticket was given out, the number of which corresponded with one placed in a large tin box, and Saturday afternoon the drawing took place by which twelve prizes were awarded, as follows:

First prize 20 rods 26-12-L American fence, N. S. Taylor, Bakersfield Route, West Plains.

Second prize—AC-2 Oliver plow, Mrs. S. G. Harrison, Cureall.

Third prize—12-ft. American drive gate, Miss Eluria Good, Route 2, West Plains.

Fourth prize—10-N Oliver plow, A. J. Ferguson, West Plains.

Fifth prize—40 rods 26-12-L American fence, C. M. Grimm, Peace Valley.

Sixth prize—13-N Oliver plow, Mrs. Walter Buford, West Plains.

Seventh prize—20 rods 48 poultry and rabbit American fence, Miss Maude Crowe, Route 4, West Plains.

Eighth prize—19-N Oliver plow, Miss Azelie La Fontaine, Pomona.

Ninth prize—40 rods 32-12-L American fence, A. M. House, Grimmet.

Tenth prize—20-N. Oliver plow, Miss Alice Clarke, Route 4, West Plains.

Eleventh prize—40 rods 39-L American fence, Mrs. H. D. Myers, Route 1, West Plains.

Twelfth prize—Oliver 50-tooth harrow, M. M. McCoy, Route 2, West Plains.

A number of traveling salesmen from wholesalers and manufacturers were present to assist in the demonstration and sale.

Among these were the following: J. W. Patterson of the Chicago office and L. B. Kean of Springfield, representing the American Steel & Wire Company; Hi Johnson, J. E. Carnell and R. D. Garland of Springfield, with Oliver Plow Company, South Bend, Indiana; G. W. Franklin of Waterloo, Iowa, representing the Iowa Separator Company, and W. A. Cook of Little Rock with the Shapleigh Hardware Company, St. Louis.

Mr. Aid wrote us on March 21st, in reply to our request for information about this event, as follows:

"As usual, we had a very successful day, and our March business is showing a marked increase over March last year."

Will farmers buy now?

Ask Aid.

He knows they will.

CONCENTRATION is the Sunglass that brings all Rays of Efforts to the one Point of Success. CONCENTRATION develops Will-Power, and opens new avenues of Understanding that would Otherwise remain closed.

## Issues Program for Panhandle Hardware Convention.

An excellent program has been arranged for the forthcoming convention of the Panhandle Hardware and Implement Association, which is to be held May 9 and 10, 1921, in Amarillo, Texas. The schedule of the sessions is as follows:

### Monday, May 9th.

- 1:00 p. m.—Call to order by President Fred L. Brown, Plainview.
- Song, "America."
- Invocation, Rev. R. Thomsen, Amarillo.
- Address of Welcome, Mayor Lon D. Marrs, Amarillo.
- Response to Address of Welcome, O. P. Rutledge, Floydada.
- Introduction of Visitors.
- President's Annual Address, Fred L. Brown, Plainview.
- Secretary's Annual Report, C. L. Thompson, Canyon, Texas.
- Appointment of Committees.
- 2:15 p. m.—
- Address, "Your Association Insurance," L. M. Yesner, Dallas.
- 3:00 p. m.—Question Box, led by S. T. Harrison, Memphis, Texas.
- 3:34 p. m.—
- Address, "Personality the Determining Factor in Business," E. G. Wier, Dowagiac, Michigan.
- 4:30 p. m.—Adjournment.
- 8:30 p. m.—
- Banquet at the Amarillo Hotel given by the Phit Club for members and ladies.

### Tuesday, May 10th.

- 9:00 a. m.—Call to order by the President.
- Question Box and Open Discussion, led by R. L. Pennick, Stamford.
- 9:45 a. m.—
- Address, "Making Business by Advertising," F. R. Jamison, Amarillo.
- 10:15 a. m.—
- Address and Discussion, "Credit and Collection," J. L. Mabie, Roswell.
- 11:00 a. m.—
- Address, ....., National Secretary, Argos, Indiana.
- 12:00 m.—Adjournment.
- 2:00 p. m.—Call to order by President.
- Question Box.
- 3:00 p. m.—Address, "Relation Between Dealer and Traveling Salesman," E. P. Thompson, Memphis.

## Retires After 55 Years as a Hardware Dealer.

After fifty-five years of activity as a hardware dealer, D. G. James of Richland Center, Wisconsin, one of the prominent merchants of southern Wisconsin, has retired from business and transferred a good share of his work to his children and grandchildren. He will take a much-needed rest.

His real estate has been, for the most part, deeded to his daughters and the big hardware and implement business transferred to his son, O. B. James, who has been the active manager for some years. The business will be continued along the same lines as in the past.

Mr. James, the retiring proprietor, has been identified with this hardware business since 1866 and has been sole proprietor since 1881.

One of his daughters, Miss Ada James, is president of the Wisconsin Progressive Women's league.

## Organizes to Make Hardware.

Allen & Company, New Haven, Connecticut, have been organized to manufacture hardware. The capital stock is placed at \$35,000. Ralph Allen, 49 Oak Avenue, Shelton, Connecticut, is one of the directors.

### Chicago Wants the 1922 National Retail Hardware Convention.

A movement with powerful backing has been originated to bring next year's convention of the National Retail Hardware Association to Chicago.

With that purpose in view a number of representative hardware manufacturers, jobbers, and retailers met at a dinner in the rooms of the Hardware Club of Chicago, Friday, April 15th.

Fred Ruhling, Treasurer Illinois Retail Hardware Association, briefly outlined the work already accomplished and read a letter from the Chicago Association of Commerce in favor of the project.

The Chicago Association of Commerce is squarely back of the movement and will cooperate in arranging the program for the business sessions and the entertainment features of the convention.

A. Vere Martin, president Hardware Club of Chicago, pledged the full support of his organization and said that the hardware trade of Chicago will guarantee to supply ample finances for the entertainment of the delegates.

Charles T. Woodward of Carlinville, Illinois, ex-president National Retail Hardware Association, Ralph W. Blanchard of Hart & Cooley Company, W. B. Lewis of Yale and Towne Manufacturing Company, Allan J. Coleman, manufacturer of hardware specialties, and several others offered valuable suggestions for an intensive campaign in behalf of Chicago as the place for the 1922 convention.

All present pledged their companies to active and financial cooperation in furthering the purpose of the meeting.

### Says AMERICAN ARTISAN Is Giving Much Good Stuff.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

In renewing my subscription I want to say that you are giving us much good stuff that we can use in our work every day.

B. F. Stow.

Wyanet, Illinois, April 6, 1921.

### Trade Opportunities in Foreign Lands.

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés, is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

34678.—A commercial agent in Canada desires to secure the representation of firms for the sale of hardware, tools, etc. Quotations should be given c. i. f. Canadian port. Reference.

34683.—A merchant in England desires to secure an agency for the sale of wooden handles, especially hickory handles for hammers, axes, picks, etc. Reference.

34698.—A builder and contractor in Mexico desires to purchase white paint, door and window hardware, etc. Quotations should be given c. i. f. Mexico. No reference offered.

34700.—A commercial agent in France desires to purchase and secure an agency for the sale of turpentine oil, white lead, dry or ground in oil, and varnishes for painters' trade. Only high-class manufactured articles required. Quotations should be given c. i. f. Antwerp or Rotterdam. References.

### Coming Conventions.

Panhandle Hardware and Implement Association, Amarillo, Texas, May 8, 9 and 10, 1921. C. L. Thompson, Secretary-Treasurer, Canyon, Texas.

Stove Founders' National Defense Association, Hotel Astor, New York City, May 10, 1921. R. W. Sloan, Secretary, 826 Conwell Building, Scranton, Pennsylvania.

National Association of Stove Manufacturers, Hotel Astor, New York City, May 11 and 12, 1921. Robert S. Wood, Secretary, National State Bank Building, Troy, New York.

Hardware Association of the Carolinas, Charlotte, North Carolina, May 10, 11, 12 and 13, 1921. T. W. Dixon, Secretary-Treasurer, Charlotte, North Carolina.

Iowa Sheet Metal Contractors' Association, Savery Hotel, Des Moines, Iowa, May 11 and 12, 1921. R. E. Pauley, Secretary, Mason City, Iowa.

American Hardware Manufacturers' Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, May 11, 12, 13, 1921. F. D. Mitchell, Secretary-Treasurer, 4106 Woolworth Building, New York City.

Old Guard Southern Hardware Salesmen's Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, May 12, 1921. R. P. Boyd, Secretary-Treasurer, Box 19, Rural Free Delivery Number 4, Knoxville, Tennessee.

Western Warm Air Furnace and Supply Association, Sioux City, Iowa, May 17 and 18, 1921. John H. Hussie, Secretary, Omaha, Nebraska.

Southern Hardware Jobbers' Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, May 11, 12, 13, 1921. John Donnan, Secretary-Treasurer, Richmond, Virginia.

Southeastern Retail Hardware and Implement Association (composed of Alabama, Florida, Georgia and Tennessee), Atlanta, Georgia, May 17, 18, 19 and 20, 1921. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta, Georgia.

National Warm Air Heating and Ventilating Association, Cleveland, Ohio, May 23 and 24, 1921. Allen W. Williams, Secretary, Columbia Building, Columbus, Ohio.

Metal Branch of the National Hardware Association, Hotel Cleveland, Cleveland, Ohio, June 3 and 4, 1921. George A. Fernley, Secretary, Philadelphia, Pennsylvania.

American Society of Heating and Ventilating Engineers, Cleveland, Ohio, June 14, 15, 16 and 17, 1921. C. W. Obert, Secretary, 29 West 39th Street, New York City.

Mississippi Retail Hardware and Implement Association, Great Southern Hotel, Gulfport, Mississippi, June 14, 15, and 16, 1921. E. R. Gross, Secretary, Agricultural College, Mississippi.

National Association of Sheet Metal Contractors, Fort Pitt Hotel, Pittsburgh, Pennsylvania, June 14, 15, 16, and 17, 1921. Edwin L. Seabrook, Secretary, 261 South Fourth Street Philadelphia, Pennsylvania.

Sheet Metal Contractors' Association of Ohio, Hotel Gibbons, Dayton, Ohio, July 19, 20, and 21, 1920. William J. Kaiser, Secretary, 123 East Chestnut Street, Columbus, Ohio.

### Retail Hardware Doings.

#### Illinois.

The Chillicothe Hardware Company has been incorporated with a capital stock of \$15,000 to deal in hardware, machinery, implements, and tools at Chillicothe.

Max Reick has purchased the interest of his partner, Walter Piper, in the firm of Reick and Piper, at Granville, and will take over the entire business.

The Rockford Hardware Company has opened a retail hardware store at the corner of Fourteenth Avenue and Ninth Street at Rockford. The company is incorporated for \$10,000 and will deal in the usual line of hardware supplies.

#### Kansas.

Jack Allen has purchased the Meinert Brothers' hardware store at Potter, and will resign his position as foreman at the Blish, Mize and Silliman Hardware Company of Atchison.

#### Minnesota.

Judd Wright and Son, dealers in hardware, have bought the two-story brick building at 714-16 Laurel Street from Con O'Brien at Brainerd.

The Browerville Hardware Company has been purchased by its former owner, F. J. Sobota at Browerville.

Fred Carpenter has bought a hardware store and business at Wasca.

Mr. Carrier has sold his hardware store at Enid to a Mr. Stout of Western Oklahoma.

#### Wisconsin.

K. L. Hollister has sold his hardware store at Beloit to William Dupre, of Antioch, Illinois.

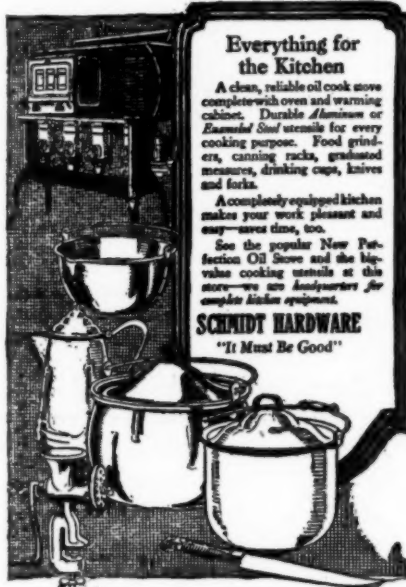
D. G. James has transferred his hardware and implement business at Richland Center to his son, O. B. James, who has been the active manager for some years.



# Advertising Help and Comment

**Send Us Copies of Your Advertisements. Let Us Help You Get Bigger Results by Advice and Suggestions. The Service Is Free. Don't Hesitate to Take Advantage of It.**

When followed by advertisements giving prices and descriptions of individual articles, an advertisement such as that of the Schmidt Hardware store, reproduced herewith from the *Des Moines Evening Tele-*



**Everything for the Kitchen**

A clean, reliable oil cook stove complete with oven and warming cabinet. Durable Aluminum or Enamel Steel utensils for every cooking purpose. Food grinder, canning racks, graduated measures, drinking cups, knives and forks.

A completely equipped kitchen makes your work pleasant and easy—saves time, too.

See the popular New Perfection Oil Stove and the big-value cooking utensils at this store—we are headquarters for complete kitchen equipment.

**SCHMIDT HARDWARE**  
"It Must Be Good"

gram, Des Moines, Iowa, serves as an introduction to the general theme of kitchen ware.

Its intention is to let the people know that the Schmidt Hardware store is equipped to supply customers with everything needed for the kitchen.

It is a profitable thing to establish the idea in the minds of the public that a store has a complete assortment of a given line.

Frequent repetition of such an advertisement—when strengthened by specific copy with equal frequency—has an institutional effect.

More or less consciously, the people who have often received the message that Schmidt Hardware store has everything for the kitchen, think of that store when the need for some particular kitchen utensil or equipment arises.

But this kind of copy is not conclusive unless it is reinforced from time to time by the presentation of one or more of the commodities which belong to the group of kitchen equipment.

That is to say, unless there appears in the same newspaper an advertisement of the Schmidt store describing food grinders, or canning racks, or knives and forks or aluminum ware or cooking utensils and giving the range of prices for these goods, the effect on general demand remains too vague.

It does not become centralized in actual purchases.

\* \* \*

## Protect Your Publicity.

"Retailers frequently are interested in the organization of trade trips, sometimes called 'booster trips,' for the purpose of bringing trade into a city from the surrounding territory.

In other words, the purpose of such a trip is to build confidence in the city as a desirable place to trade. But how about maintaining and protecting that confidence?

When you induce the farmer and his wife to come to your city to trade rather than to some other point, they are influenced by the advertising in your city.

The local retailer by himself has no means of seeing that they trade only with stores advertising under a reputable policy.

In other words, the confidence built by a trade trip may be undermined and damaged through failure to eliminate misleading and fraudulent advertising in the city in question.

The local better business bureau solves the problem for the retailers.

\* \* \*

From time to time the advice is given in these columns to make a collection of advertisements and classify them according to seasons of the year as well as according to commodities or groups of commodities.

When you are preparing copy for your store, you can refer to your file of advertisements and obtain helpful suggestions from the experience of others.

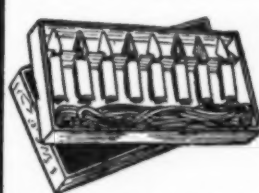
Worthy of a place in such a col-

lection is the advertisement of the United Hardware & Tool Company, reproduced herewith from the *Cleveland Press*, Cleveland, Ohio.

You will notice that prices are plainly quoted throughout the text.

The illustrations are sufficient to arrest attention and to give an idea of the goods.

## Christmas Tips For Early Shoppers



**Electric Xmas Tree Outfits With the New Genuine Mazda Lamps**

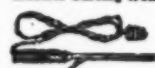
The best made outfit with 15-volt Mazda lamps which give the most service possible.

8-light Mazda Outfit, Regular \$3.75, Special... \$2.75  
16-light Mazda Outfit, Regular \$7.50, Special... \$5.50  
8-light Mazda Outfit with candles, as illustrated, \$3.75  
16-light Mazda Outfit with candles, as illustrated, \$7.50

## A XMAS TREE HOLDER SPECIAL

Large enough for any size tree. One that cannot tip over and adjusted to tree in 5 minutes... 43c

## Electric Curling Iron



Light, handy and practical curling iron. Fully guaranteed. Very special! \$3.45

## Radi Toaster Range



Bake, toast, fry. Very convenient and economical for all kinds of table, cook and baking. Special! \$3.69

## Lamp Stands

Solid brass, for portable and floor lamps. Special! 79c

Complete with two push-chairs \$1.98

## Twin Light Socket

Non-breakable and gives you two outlets where you need one. Very special! 98c

## Clean Up Sale FLASHLIGHTS

### Minerhead Flashlights



Small 2-cell Fiber Case complete with lamp and battery. Special! 98c

Large 2-cell Fiber Case, complete with lamp and battery. Special! \$1.29

Large 3-cell Fiber Case, complete with lamp and battery. Special! \$1.48

Very Pocket Flashlight. Metal plated rubber case. Special! 69c

### Tubular Flashlights



Small 2-cell Fiber Case, complete with Lamp and Battery. Special! 79c

Large 2-cell Fiber Case, complete with Lamp and Battery. Special! 98c

Large 3-cell Fiber Case, complete with Lamp and Battery. Special! \$1.29

Very Pocket Flashlight. Metal plated rubber case. Special! 98c

**UNITED HARDWARE & TOOL CO. INC.**  
306 PROSPECT AVE.  
St. Clair Ave. & E 55 St. St. Clair Ave. & E 125 St.

Enough words of description are used to carry the message of the United Hardware & Tool Company to its patrons and prospective customers.

The layout is well arranged and the space is used to full advantage without overcrowding.

# Warm Air Heating and Ventilating

*Better Installations. How to Sell More Warm Air Heaters.  
Reports of Progress in Warm Air Heater Research Work.  
Ventilating Factories, Garages, Theaters, and Houses.*

## **EXPLAINS WARM AIR FURNACE LAW OF SIOUX CITY, IOWA.**

Considerable difference of opinion has arisen concerning the merits of the warm air furnace ordinance of Sioux City, Iowa.

One of the leading dealers and installers of that city declares: "If the Fire Underwriters demand this law, it is goodbye to warm air furnaces in old houses."

F. E. Colby, Building Inspector of Sioux City, has sent the following circular letter to all warm air furnace contractors of the city together with a copy of the main provisions of the ordinance:

"To All Furnace Contractors,  
"Gentlemen:—

"I enclose herewith a synopsis of the requirements for furnace installation and hot air heating systems. I also enclose a form of application which you are to fill out when asking for permits. This application may also be used for drawing a plan for the lay out on the reverse side of the same. It should be made out in duplicate and one copy approved by this office and retained by the contractor, the other copy will be filed as a record in this office.

"There are many erroneous ideas being circulated as to the prohibition of pipeless furnaces and special makes of furnaces. For your information I will state that no make or kind of furnace is barred that complies with the size required by the code. It is not intended to work a hardship on any owner or contractor and all I ask is a reasonable and practical compliance with the code.

"The standard size double stack not over  $3\frac{5}{8} \times 12\frac{5}{8}$  inches outside measurement, with a free air space not less than 5-16 inch between inner and outer stack, will be accepted as a sufficient compliance with the requirements, when placed in partitions the studdings of which are full  $1\frac{1}{4}$  inches apart in the clear.

"If this clearance can not be obtained it will be necessary to line the pocket with asbestos board or other fire resisting material.

"In old houses, it will only be required to remove lath and plaster from one side of the partition where the stack goes, provided the side of the stack coming against the unprotected wood lath shall be insulated with  $\frac{1}{8}$ -inch asbestos board.

"I ask your earnest cooperation in a practical enforcement of the ordinance and you will find me ready and willing to assist you in every way possible.

Yours respectfully,

F. E. COLBY,  
Building Inspector."

**Regulations for Hot Air Furnaces, Sioux City, Iowa.**  
SECTION 17—PERMITS, REQUIREMENTS, CLASSIFICATION:

(3) Requirements of Permits:

(g) Furnace Permits:

It shall be unlawful to install warm air heating apparatus or furnaces or remodel and change the arrangement or construction of the same without first having obtained a permit therefor.

Application for such permit shall state the location and ownership of the building in which the apparatus is to be installed, the size and make of furnace to be installed, and such other information as the Building Inspector may require. Such application shall be accompanied by plans and specifications in duplicate showing the complete installation.

Permit fee of \$1.00 to be paid for furnace permits.  
SECTION 140—SMOKE AND HOT AIR PIPES:

(1) Furnace and Heater Pipes:

In all cases where hot water, steam, hot air or other furnaces are used, the smoke-pipe shall be kept at least two (2) feet below the wooden beams or ceilings above the same, unless said beams or ceilings shall be properly protected by a shield or tin plate suspended above said smoke-pipe, with sufficient space for free circulation of air above and below said shield or tin plate, and where said smoke-pipes pass through wooden partitions they shall be insulated by eight inches of masonry or an approved ventilated metal thimble.

(3) Hot Air Registers and Pipes:

All pipe and register boxes used for the distribution of hot air from furnaces, shall, when the air is heated directly, be made of bright tin and double with not less than one-half inch air space between the inner and out pipes, or bright tin covered with one-half inch of corrugated asbestos paper. Neither the pipe nor the covering shall be placed within one inch of any wood studding and no wood lath shall be used to cover the portion of such partition in which the hot air pipe is located.

Return pipes shall be made of galvanized iron of uniform sectional area of air passage.

The air passage sectional area of return pipes shall not be less than the combined areas of the hot air risers.

Hot air pipes shall be exposed not less than five feet measured horizontally from the furnace before being concealed in any wooden partition or floor.

SECTION 141—BOILERS AND FURNACES.

(1) Brick Set Furnaces:

The tops of all furnaces, set in brick, shall be covered with brick or other fire-proof material, properly supported on iron bars, and so constructed as to be made perfectly tight. Said covering to be in addition to and not less than six (6) inches from the ordinary covering of hot air chamber.

(2) Portable Furnaces:

The top of every portable furnace, not set in brick, shall be kept at least one (1) foot below all wooden



beams or ceilings and said beams and ceilings shall be covered with approved fire-proof materials.

(3) Size of Furnaces:

Hot air furnaces hereafter installed, shall have at least one square foot of radiation surface for each five hundred (500) cubic feet of habitable space served by such furnace.

(5) Protecting Pipes:

Steam, hot air or hot water pipes passing through floors, shall be protected with metallic thimbles at least one-half inch larger in diameter than the pipe passing through the same; thimbles to extend through floor and ceiling and to be held in place with flanges.

SECTION 142—BAKE OVENS AND RANGES.

(3) Floor Registers Forbidden:

No floor register for heating purpose shall be used in any theater and no coil or radiator shall be placed in any aisle, hall, corridor, stairway or passageway used for egress, but the same shall be placed in recesses formed in walls or partitions.

### **DISCUSSES HEAT REGULATION IN RELATION TO HUMIDITY.**

The more thoroughly the dealer and installer of warm air heaters understand the scientific side of heat regulation, the better able are they to give adequate service and to increase the use of warm air heaters.

Therefore, there is much valuable assistance in the following paper by E. P. Lyon of Minneapolis, Minnesota, Professor of Physiology and Dean of the Medical School of the University of Minnesota. It is reproduced from the Journal of the American Society of Heating and Ventilating Engineers:

The human body is a thermostat. The temperature of the body,—that is, the internal parts, is constant. By constant is meant exactly what engineers mean when they say that the temperature of a room with thermostatic control is constant. It really varies somewhat, and the small variations are made the basis of regulation.

The ancient philosophers and physicians could not understand how the warm blooded animals maintained their temperature. They looked upon animal heat as mysterious and in the category of spirits, like magnetism and electricity. We know now that animal heat is the same as other heat, and that the body obeys all the laws of thermo dynamics, including the fundamental one of conservation of energy.

The body is a machine for transforming energy. One aspect of this transformation is the developing and regulating of heat. The constant temperature of the body is an expression of the fact that the body loses its heat as fast as it produces it, or produces heat as fast as it loses it.

In the bacteriological laboratory at the University of Minnesota are two incubators, automatically controlled. One is so arranged that it turns on an electric stove whenever the temperature falls below a certain point, and shuts it off again when the temperature rises above that point. The body uses this principle to some extent.

The other incubator (a cool one) has a net work of water pipes. When the temperature rises the city

water is turned on and circulates through these pipes and carries off the heat. When the temperature falls the water circulation is shut off. If we cooled and recirculated this water, as is done in an automobile and as the body does the blood, we should have an exact example of the other principle of heat regulation used in the body.

When the automatic control fails to adjust one of these incubators to the temperature for which it is "set," the temperature of the incubator may go too high or fall too low. In either case the bacterial cultures kept in the incubator may die. This is exactly true for the human body.

The body is an incubator for the millions of living units (cells) of which it is composed. If the temperature goes too high, we call the condition "fever," and the cells suffer.

If the temperature goes too low, we speak of "sub-normal temperature"; and this likewise is injurious and sometimes fatal to the cells and therefore to the person whose body is composed of these cells.

Such failure of regulation, in the case of the incubators, might be due to disorder (disease) within the apparatus, or it might be due to such unusual outside conditions that adjustment would be impossible. Both contingencies find absolute counterparts in the operation of the regulatory mechanism of the human body.

#### **Heat Production.**

The body produces heat by oxidizing foods. The steps in the process are complicated, but in the long run, the result is the same as if the food were burned in a furnace. One gram of starch or of fat will give in the body exactly as many calories as if burned in a bomb calorimeter, and the waste products are the same.

The chief place of heat production is the muscles. When muscles act, that is, contract, they produce much more heat than when they are resting; but resting muscles produce some heat all the time. Probably all living matter produces heat in certain phases of its chemical activity.

Moreover some muscles, for example the heart and the respiratory muscles, are acting all the time. Thus the body is constantly producing heat. Unless it loses heat as fast as it is produced, the temperature must rise, and the opposite is equally true.

Since the heat production may vary, one can readily understand how body temperature may be regulated from the production side. Partially we do this voluntarily.

On hot, humid days we avoid muscular exertion as much as possible; that is, we produce as little heat as possible. In cold weather we exercise strongly and produce more heat.

But partially the regulation of production is unconscious and automatic (involuntary). Shivering is a visible example of involuntary muscle contraction to produce heat, but there is another type of heat production in muscle.

In hot, moist, atmospheric conditions, the muscles are partially relaxed and produce little heat; in cold weather they are tightened up and produce more heat.

Physiologists call such tightening "muscle tonus." It is controlled through the nervous system by what we call reflex action, which will be referred to later.

**Heat Loss.**

The more important element of body temperature regulation is, however, on the heat loss side. This corresponds to the second type of incubator previously mentioned.

The body loses heat in several ways. Usually it is warmer than the substances (air, especially) in contact with it. Therefore according to the laws of physics, heat will be conducted, as heat, into neighboring matter.

The rate of such transmission varies with the difference in temperature of the substances in contact; say, body surface and air. This difference in temperature may vary from the outside in a variety of ways.

By use of a fan we can renew the layer of air frequently and thus increase temperature difference and heat loss. By clothing we can keep the layer of air in contact, raise its temperature and diminish the rate of heat loss by conduction, etc.

Part of the surface of our body is turned in to form the lungs and alimentary canal. As long as the temperature of the air breathed is below the body temperature, the air will be warmed in the air passages and lungs by conduction.

Similarly, food or drink of a temperature less than that of the body will be warmed by conduction in the alimentary canal.

The rate of heat loss by conduction depends on the heat capacity and conductivity of the material in contact with the skin. For example, a marble floor under one foot feels colder than a rug under the other foot, though the temperature of both floor and rug are the same.

We say the marble is colder. But really it is not the marble but the skin of the foot placed on it that is colder. The marble conducts off the heat faster than the rug and can hold more of it. The foot telegraphs to the brain that the foot is cold. The brain jumps at conclusions, as it often does, and says the marble is cold.

This same principle must be extended to moist and dry air. Moist air has a greater heat capacity than dry air of the same temperature. Hence at temperatures around the freezing point and somewhat above, moist air "feels" colder than dry air of same temperature.

The moist air takes away heat from the skin faster; therefore, the skin is colder. The brain which was created before the thermometer and has never gotten over its primitive errors of thought, "says" the damp air is "cold."

Conditions are very different at higher temperatures, where atmospheric humidity, by hindering evaporation, is a heat preserving factor for the body.

Thus arises the anomaly that humidity may keep us warm or cool, depending on the temperature of the air in which the moisture is held.

If the temperature of the material in contact with either the outside or inside surfaces is the same as that of the body, no heat can be lost by conduction.

Much the same may be stated in regard to the second method of heat loss; namely, radiation. By this is meant loss of energy in the form of ether waves.

This form of heat loss occurs only from the skin

surfaces. No heat can be lost by radiation (for example, in a room), if all the surrounding objects and walls are of the temperature of the body.

The third way in which the body loses heat is by evaporating water. This occurs at both the skin surface and the lung surface.

The rate of evaporation and consequently of heat loss, varies with numerous factors. It increases with temperature of the air on the skin, and therefore acts, in general, opposite to conduction and radiation, which is a fortunate fact.

Evaporation increases with increased renewal of air, consequently a fan or wind cools the body; as likewise does rapid breathing, for example, the panting of a dog.

Evaporation rises with increase of the surface of liquid exposed. We expose more liquid surface when we sweat than when the skin is, as we say, "dry." Of course it is never absolutely dry, and insensible perspiration is constantly being evaporated.

Clothing tends to keep a layer of saturated air between the skin surface and the general atmospheric environment and consequently, always restricts heat loss by evaporation, just as it does by conduction and radiation. Naturally, different types of fabric vary in conductivity, porosity and other qualities.

In accord with the laws of physics, the body can not lose heat by evaporation in air already saturated and of body temperature. That is the reason, the so-called "steam room" of a Turkish bath feels so hot; it is not above body temperature, but on the contrary lower. It is not the *room* that is hot; it is the *skin*.

(To be continued next week.)

### **Reckons by Volume the Air Required for Combustion.**

It is usual to consider the amount of air for the combustion of coal in terms of its weight per pound of the fuel. In a recent article in *Power* some interesting results are obtained by expressing the weights of the air and fuel in terms of their respective volumes.

Thus with an air supply 40 per cent in excess of theoretical requirements, and coal containing 10 per cent of ash, about 14.6 pounds of air are required per pound of fuel.

Since the pressure of the atmosphere on each square inch of the earth's surface at sea level is 14.7 pounds, all the air directly above a square inch of the earth's surface weighs 14.7 pounds.

The earth's atmosphere is estimated to extend for a distance of over forty miles from the earth's surface.

Such a column of air, 1 inch square and over 40 miles in height, would be sufficient completely to burn the pound of coal if it could be brought in contact with the fuel.

The pound of coal would occupy a column 3 feet high with one square inch base.

A similar mass of air on the ground, would of course, occupy a smaller volume because of the greater and uniform density of the air at the earth's surface.

At 62 degrees Fahrenheit and normal atmospheric pressure the air column of one square inch cross section is  $5\frac{1}{4}$  miles high.



# Practical Helps for Tinsmiths

*No Two Jobs Are Exactly Alike. Therefore, the Sheet Metal Worker Has to Meet Each Difficulty as It Comes. Send Your Problems to Us. Let Our Experts Help You.*

## DETAILS FOR VENTILATOR DAMPER.

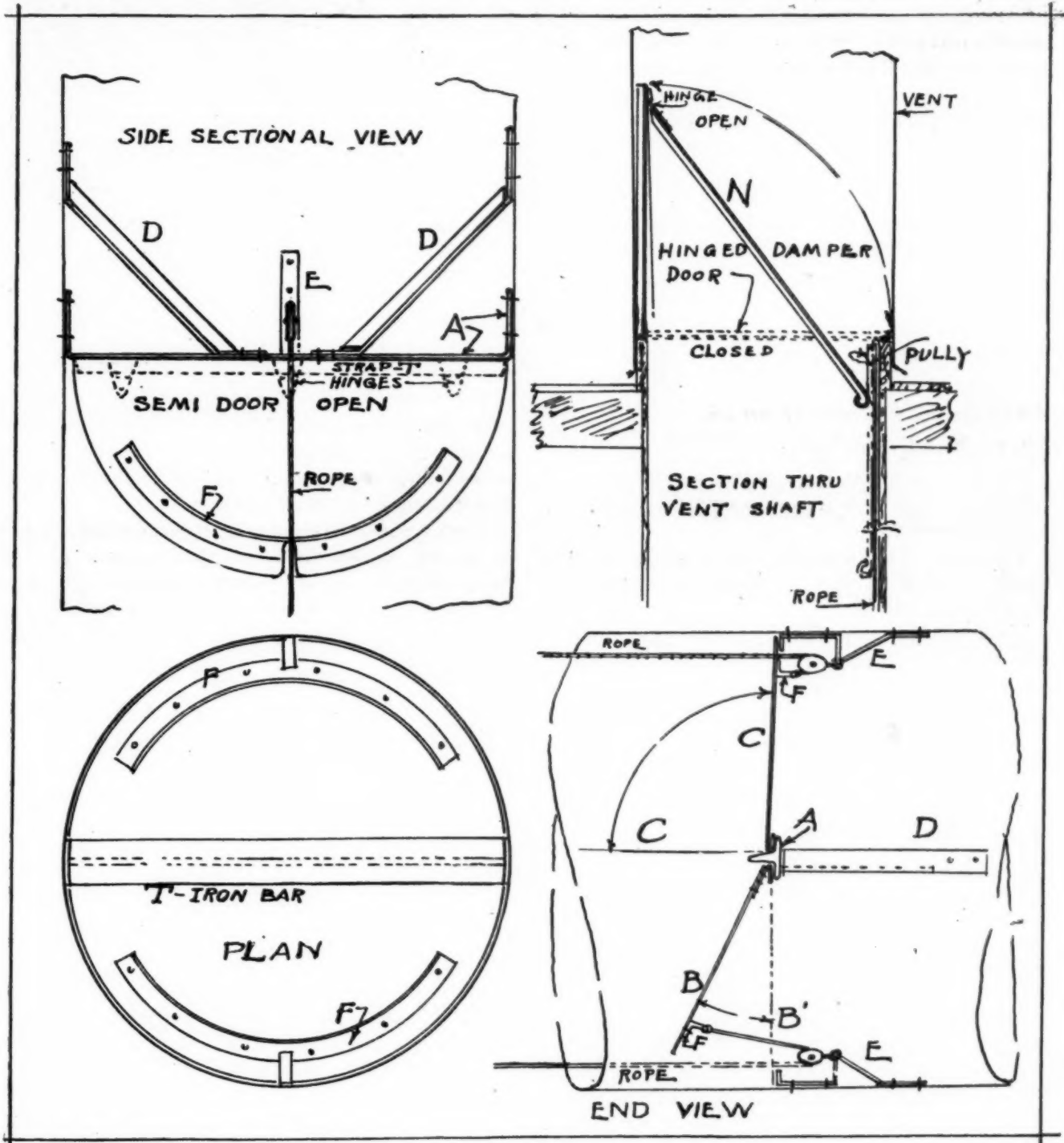
By O. W. Kothe, Principal St. Louis Technical Institute and Instructor in the David Rankin, Jr., School of Mechanical Trades, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

Responding to the inquiry of Roy E. Tessier of Mitchell, South Dakota, for dampers in large ventilator pipe, made of 14 gauge iron, the following suggestions in drawing may be of service. Not knowing the exact requirements of the job or duties of it, it is

rather hard to work out details, and so these suggestions may be taken to help work out something else, if need be.

For a large ventilator 6 feet in diameter as you speak of it would no doubt be best to make the damper in two pieces, hinging it by a tee bar in the center and operating it with pulleys. This will allow opening and closing and overcomes that angle of a damper made in one piece to stand obliquely.

The tee bar can be made similar as at A with part



Details for Ventilator Damper.

of the lower web cut so the other part can be bent up in riveting to the pipe as shown in the sectional side view.

If there should be a tendency to sag, angle iron braces as at B can easily be added. The end view and plan give additional views of the damper, and its operation by means of the pulley bracket E, which acts as a stop for the damper, and for attaching the pulley.

If necessary a counterbalance weight can be easily arranged for. To prevent the damper from twisting, an angle iron F can be stretched to the curve of the pipe and riveted on as shown in plan. Other tradesmen may have other ideas on this subject, but it all hinges on the question of working satisfactorily.

For a square or rectangular damper 7 x 8 feet, a similar treatment can be followed, by making the damper in two pieces. If desired, two extra pivots can be used in place of one pivot as in a full damper.

This would be nothing more than two dampers on a pivot in the one pipe, and set so they will close and still not interfere. At times, a lifting bar as at N, is found satisfactory. But for a heavy damper, this would be rather hard in raising and lowering unless a double block and tackle arrangement is used.

The lifting bar N is made of angle iron with a curve bent on the end. This prevents the bar from sticking as it lowers. A hinge is riveted to the top and to the damper.

The damper ordinarily would be encircled with angle iron re-enforcement. But this makes a rather heavy job for raising and lowering, but still it must be re-enforced to prevent the metal from sagging.

The details for opening and closing louvers will be shown a little later.

### **Announces Examination for Sheet Metal Worker.**

The United States Civil Service Commission announces an open competitive examination for metal-working pressmen.

The duties of the appointee will consist in operating presses fitted with dies for blanking, piercing, and bending sheet metal.

Those who desire to take the examination should at once apply for Form 1800 to the United States Civil Service Commission, Washington, D. C., stating that they wish to take the examination for Metal-Working Pressman.

### **Milwaukee Sheet Metal Local Holds Monthly Meeting.**

Correspondence from the Trade Development Committee of the National Association of Sheet Metal Contractors constituted one of the main topics of discussion at the regular monthly meeting, April 6th, of the Master Sheet Metal Contractors' Association of Milwaukee, Wisconsin.

The president of the Local, William Hammann, appointed a committee consisting of Messrs. Tonnsen, Jeske, and Biersach, to obtain subscriptions for the book on Trade Development which is to be compiled by the Trade Development Committee of the National Association.

A letter was received from the Secretary of the National Convention Committee, together with forms to be filled in for overhead expense demonstration at the National Convention to be held June 14, 15, 16, and 17, 1921, in Pittsburgh, Pennsylvania. These forms were distributed among the members.

The John Drogkamp Company of Milwaukee was elected to membership in the Master Sheet Metal Contractors' Association of Milwaukee upon motion of J. M. Hollitz, seconded by R. Jeske.

### **Friedley-Voshardt Company Has New Conductor Fastener.**

Double the durability is claimed for the "A. H. K." fastener over the old style conductor fasteners now on the market.

This is a new product of the Friedley-Voshardt Company, Chicago, Illinois, and patent has been applied for it.

The illustration gives a clear idea of the new conductor fastener. The drive marked "D" is made of mild steel black band iron, punched and formed by steel dies in punch presses and galvanized after forming.

"A. H. K." Conductor Fastener made by Friedley-Voshardt Company, Chicago, Illinois.

The perforated clip marked "C" is made of deep drawing zinc, which is easily soldered to galvanized conductor pipe or zinc conductor pipe, whatever the case may be. It has a double stem which is bent so as to form four thicknesses of metal.

It will be noted that the double stem construction acts as a channel for the drive having a double wall protection on each side, which holds the conductor pipe in a vertical position at all times.

Further particulars and price quotations may be had by writing to Friedley-Voshardt Company, 733-737 South Halsted Street, Chicago, Illinois.

### **Zinc Roofing Does Not Require Painting.**

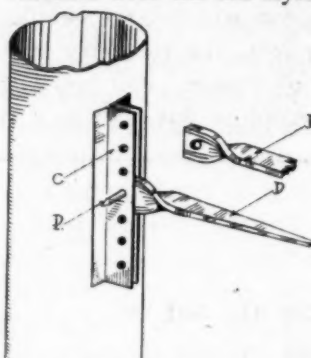
One of the advantages of zinc roofing, from the point of view of economy, is that it does not require painting.

A firm who recently ordered zinc roofing to cover one of its large factory buildings stated that the roof which it is now replacing had been on eleven years, that it had been painted nearly every year, and that the painting cost for the last year was over a dollar per square.

The upkeep on this particular roof, therefore, cost much more than the original roofing.

The buyer not only expressed himself as very well pleased that pure zinc roofing was now obtainable, but also stated that he regarded it as the cheapest roof, all things considered, upon the market.

A Large Part of our Profit lies in what You Think of us.





# *Fred Lacy Gets the Blues and Imagines That if He Had a College Education He Would Gain More Business.*

*Greenberg Shows That Fred Knows More About Sheet Metal Work Than His Banker and Can Do a Better Job Than Any College Man.*

Written Especially for AMERICAN ARTISAN AND HARDWARE RECORD by J. C. Greenberg, Peoria, Illinois.

(Copyright 1921 by J. C. Greenberg.)

When I entered Fred Lacy's shop, I found him with a bad case of the blues. He was not at all sociable,



J. C. Greenberg.

and was certainly in no mood to buy goods.

So I set about to get him in a good frame of mind first, and then sell him.

"What's the matter Fred, you're looking kind of sour this nice morning. What ails you?"

Fred looked up at me. We were old time friends, and confidential on a good many things, and in reply to my question he answered:

"Oh, I just got the blues, I guess. I've been thinking about business. Here I've been in this shop a little over twenty

years, and am really no better off than when I started in. What do you suppose is the matter?"

"Well, Fred," I ventured to say, "I can not tell what the matter is. You should know the answer better than I do. What do you think is the matter?"

"Oh, in a way I know what's wrong," Fred said wistfully, "but I can't remedy it now. It is too late."

"It is never too late, Fred, to remedy anything," I remarked in a sort of a consoling way. "Maybe if you tell me what's wrong, we can fix it. It can not hurt to try."

"It is just like this," Fred began. "When I was a kid, I had to quit school and had to go to work for a living. I had no schooling to speak of, and I believe that my ignorance is my downfall. If I had a better education, I know that I would be a better success. Without an education, a man has absolutely no right to be in business.

"That is what's wrong and keeping me down to a small peanut stand tin shop," he continued. "I'd give a whole lot to sell out right now, and do something else."

"Is that all that bothers you, Fred?" I asked somewhat relieved.

I was under the impression that he had some other

trouble that was really bad. I looked for family trouble or something like that.

"Is that all?" Fred asked in disgust. "Isn't that enough?"

"Why Fred, you have no trouble at all," I answered assuringly. "Your real trouble is that you only think that you have no education, and act as you think. What education do you really need in your business? Why do you dwell on education, when you do not need education in business?"

"You are kidding me when you say that I do not need education in my business," Fred spoke up in defense. "Without education a man is lost—absolutely lost."

"All right Fred," I challenged. "Let us look into this matter and see what there is to your argument. In the first place, your customers never yet have asked you to what college you have attended. In the second place, if you had a college education, and knew Latin, Greek, physiology, trigonometry, history and music, how could you use it in this business? Business is not a matter of education—it is merely a matter of efficiency in the mechanical art of your trade."

"No. I can't agree with you in this," Fred argued. "I am sure that one who is ignorant can not ever expect to succeed in business, and that is why I am not a success."

"Now look here, Fred," I insisted. "Suppose you could hire a college man for your place, what would he know about business? What would he know about the mechanical art concerning this business? Absolutely nothing."

Fred sat silent. He did not reply.

"You must understand," I continued, "that education which can not be used in a certain business is no use to that business. Your education is complete as far as your business is concerned. You do a good job, you are a first class mechanic, and are a willing man, but the trouble really is, that you do not rely on yourself. You do not believe in yourself. You put yourself into an inferior class, and compel yourself to stay there."

Still Fred was silent. He was listening closely.

"In business we must have executive ability. We must have the power to meet and convince the public of our services. We must know our business so well that we will inspire confidence. We must know many facts about our business that we will be a good teacher for the prospective customer. Higher education is not necessary. People do not buy your education in the sheet metal line. You, right now, can do a better job

of sheet metal work than your banker can. You know more about sheet metal work than the professor of the college in your town, and can do more good to a leaking roof than the President of the United States can."

"Yes," Fred said, "all this sounds all right, but if I had an education, I could be in better shape to tackle the better class of trade."

"You are mistaken Fred," I assured him. "The kind of work you do lasts longer than your personality. It is not how well you can discuss things that counts, it is after all how well you do the things you know. Let me tell you a story that just fits into your case exactly:

"Once there was a young fellow, who, like you, had a very poor schooling. In fact, this fellow could neither read nor write. His sole ambition was to be the janitor of the new school house which was to be finished soon. When the building was finished, he saw the head of the board of education, and applied for the job. He was asked what education he had, and he was compelled to admit that he could not read nor write. This of course killed the prospects for the janitor job. This young fellow knew that he had to work, secured a job in the foundry at the rate of a dollar and half per day.

"It so happened however, that this young man had executive ability, and was working his way up the ladder in that foundry.

"After twenty years of hard work and observation, he became owner of the foundry, and had amassed a vast fortune.

"One day he was invited to speak before a class of young men. His subject was 'How to Succeed.'

"He gave the boys the real dope on observation, ambition, inspiration and all that, and as he had finished his talk, the professor of the class wishing to give the speaker a good send off said:

"Boys, here we have a shining example of what study and application will do. The speaker started in a young man at a dollar and a half a day, and by perseverance, has amassed a vast fortune. Is it not so, Mr. Speaker?"

"The speaker arose and said to the professor: 'Did I understand you to say that I studied, and became successful?'

"Yes," answered the professor, 'I did say that.'

"Well," said the speaker, 'I did not study, for I can not read nor write. Therefore, I could not study.'

"What!!" exclaimed the professor. 'You can not read nor write, and yet are so wealthy? Where do you suppose you would be if you had a college education?'

"I know where I'd be, Mr. Professor," he answered quickly. 'I'd be janitor in that school house—that's where I'd be if I had an education. I am what I am, because I know my business.'"

This story made Fred laugh. He saw the point at once. If you are in Fred's boots, forget it. Just know your business better than your competitor, and you will bring home the bacon.

### **Missouri Auxiliary Prepares for State Convention.**

For the purpose of perfecting the organization of the recently formed Jobbers' and Salesmen's Auxiliary of Missouri, E. B. Langenberg, Acting Chairman, has called a meeting to be held Monday evening, April

18th, at 4057 Forest Park Boulevard, St. Louis, Missouri.

The Missouri Auxiliary is working hard upon the preliminaries for the organization of a Missouri Sheet Metal Contractors' Association. Letters are being sent out into the state calling for an expression from the sheet metal contractors and asking for their cooperation in the forming of a state association. As soon as all the replies shall have been received the call will be issued and the convention date set.

At a meeting of the Sheet Metal Contractors' Association of St. Louis, Tuesday, April 12th, a committee was appointed to work with a like committee from the Sheet Metal Consumers' Protective Association in getting the state organization under way.

It is the intention of the Jobbers' and Salesmen's Auxiliary of Missouri to have their organization in good working order so that they may be able to assist in the formation of the Missouri Sheet Metal Contractors' Association. Already the Auxiliary is discussing plans for the entertainment of visitors and conferring with local sheet metal contractors regarding a program for the convention which will be both attractive and educational.

### **Lincoln Steel Company Is Formed by Chicago Men.**

Thoroughly equipped by training and extensive technical experience, the personnel of the newly organized Lincoln Steel Company, 112-118 North May Street, Chicago, Illinois, gives ample assurance of intelligent service and satisfactory attention to inquiries and orders.

The president of the Lincoln Steel Company is Harry G. Masten, formerly of the National Steel Company, Chicago. He is familiar with the requirements of the trade from every angle. People like to deal with him because he is sincere, broad-minded, and reliable.

Joseph V. Arnhorst, lately of the Chicago office of Merchant & Evans Company, is vice-president of the Lincoln Steel Company. In addition to his comprehensive knowledge of the business, he has an attractive personality. Actually, he takes pleasure in supplying the needs of customers and many of his friendships are the outgrowth of his business relations.

It is the purpose of the Lincoln Steel Company to handle for prompt shipment from Chicago warehouse stock, cold drawn screw stock and shafting, cold rolled strip steel, sheet steels of all qualities, bright coke and charcoal tinplate, roofing tin, and long terne plate.

### **Ad in AMERICAN ARTISAN Brings Many Replies.**

TO AMERICAN ARTISAN AND HARDWARE RECORD:

Please discontinue our "Help Wanted" ad in your journal. We have received a large number of applications from which to select the kind of workman we want.

Yours truly,

J. R. HAAS.

El Paso, Illinois, April 14, 1921.



# Instructive Notes and Queries

*The Service of This Information Bureau Is Free to Our Subscribers and They Are Urged to Use It Freely.*

## Address of American Pin Company.

From R. B. Fitzgerald, Madison, South Dakota.

Please give me the address of the American Pin Company.

Ans.—Waterbury, Connecticut.

## Address of Lyon Conklin and Company.

From W. J. Pegg, 408 Marsac Street, Bay City, Michigan.

Can you tell me if Lyon Conklin and Company are still in business and if so where they are located?

Ans.—They are still in business and are located at 19 Balderston Street, Baltimore, Maryland.

## Sweeping Compound Cans.

From M. Reisinger, Sparta, Wisconsin.

Kindly advise who manufactures sweeping compound cans of different sizes.

Ans.—American Can Company, 104 South Michigan Avenue, Chicago, Illinois; National Can Company, Detroit, Michigan; Buhl Stamping Company, Detroit, Michigan.

## Sheet Metal Works.

From Jim Simis, Broken Bow, Nebraska.

I would like to know who does sheet metal stamping of all kinds.

Ans.—B. J. Stamping Company, 1435-7 Dorr Street, Toledo, Ohio; Atlantic Stamping Company, Rochester, New York; Rudolf Sperr, 5118 Wentworth Avenue, Chicago, Illinois.

## Motors for Watercrafts.

From E. A. Gansing, 836 Park Avenue, Newport, Kentucky.

Will you please furnish me with the names of manufacturers of motors for watercrafts?

Ans.—Lockwood Ash Motor Company, Jackson, Michigan; Spinaway Boat Motor Company, Freeport, Illinois; Blakley Engine Company, Muskegon, Michigan; Caille Perfection Motor Company, Second and Amsterdam Streets, Detroit, Michigan; Evinrude Motor Company, 279 Walker Avenue, Milwaukee, Wisconsin.

## Steel Back Ladder.

From George Alexander, Westerville, Ohio.

Can you inform me who makes a steel back ladder?

Ans.—John Tupper, Lynn, Massachusetts; Holmquist and Company, 82 West Washington Street, Chicago, Illinois.

## Urns.

From Schenectady Stove and Repair Company, 520 Broadway, Schenectady, New York.

We would like to know where we can buy urns for parlor heaters and also hot frankfort plates.

Ans.—1. Ireland and Matthews Manufacturing Company, Detroit, Michigan; Troy Nickel Works, Albany, New York; Matthews Manufacturing Company, Worcester, Massachusetts, can furnish you with urns for parlor heaters. 2. Albert Pick and Company, 208 West Randolph Street, Chicago, Illinois, can supply you with hot frankfort plates.

## Lawn Swings.

From Schenectady Stove and Repair Company, 520 Broadway, Schenectady, New York.

Kindly advise where we can purchase lawn swings.

Ans.—Babcock Manufacturing Company, Leonards-

ville, New York; Border City Industrial Company, Border City, New York; Eureka Mower Company, 16 Hickory Street, Utica, New York.

## "Boss" Clothes Washing Machine.

From McQuesten Hardware Store, 123 West Second Street, Muscatine, Iowa.

Please furnish us with the name and address of the manufacturer of the Boss hand power clothes washing machine.

Ans.—Boss Washing Machine Company, Cincinnati, Ohio.

## All Metal Kitchen Cabinets.

From Charles Munznen, care of George M. Clark and Company, Harvey, Illinois.

Can you inform us who makes all metal kitchen cabinets?

Ans.—Art Metal Construction Company, Jamestown, New York; McClernan and Company, 122 South Michigan Avenue, Chicago, Illinois; Ohio State Stove Company, Columbus, Ohio.

## Plumber's Pipe Vise.

From C. A. Peck Hardware Company, Berlin, Wisconsin.

We would like to know where we can secure a plumber's pipe vise which fastens onto a post or bench with a chain instead of with lag screws for a pipe ½ inch to 1½ or 2 inches.

Ans.—J. H. Williams and Company, 1000 West 120th Street, Chicago, Illinois.

## Pruning Knife.

From C. A. Peck Hardware Company, Berlin, Wisconsin.

Where can we procure a pruning knife with a four-inch blade, not the folding kind, but one with a straight blade like a butcher knife?

Ans.—C. S. Osborne and Company, Box 183, Newark, New Jersey; Cattaraugus Cutlery Company, Little Valley, New York.

## Ney Grapple Forks.

From Geigel Hardware Company, Monroe Wisconsin.

Kindly advise where we can purchase the Ney grapple forks.

Ans.—V. L. Ney Company, Canton, Ohio.

## Nickeloid.

From D. and F. Kusel Company, 108 West Main Street, Watertown, Wisconsin.

Can you give us the names and addresses of manufacturers of nickeloid?

Ans.—American Nickeloid Company, Peru, Illinois; Merchant and Evans Company, 347 North Sheldon Street, Chicago, Illinois.

## Copper Valleys.

From Charles Munznen, care of George M. Clark and Company, Harvey, Illinois.

We would like to know whether copper valleys on a roof have a bad effect on eaves trough which are made of galvanized iron?

Ans.—We have referred your inquiry to the American Rolling Mill Company who do considerable research work, and they tell us that copper valleys would most assuredly have a very bad effect on galvanized eaves trough because the electrolytic action of the copper would eat up the iron, causing it to rust very quickly.

# Illustrations of New Patents

**Watch This Page. Keep Yourself Informed Concerning Improved Devices Which May Save Labor in Your Shop or Add Another Source of Income to Your Retail Store.**

1,367,233. Combination-Lock. Edward Brockup, Carteret, N. J. Filed June 30, 1920.

1,367,242. Receptacle. Stephen Dembowski, Hamtramck, Mich., assignor of one-third to Stanley Rutkowski and one-third to Joseph Barnikowski, Hamtramck, Mich. Filed March 25, 1920.

1,367,260. Reciprocating Saw. Elias S. Homstad, Casper, Wyo. Filed June 27, 1917.

1,367,270. Safety-Hook. William P. McKinney, Tacoma, Wash. Filed May 14, 1920.

1,367,280. Silverware-Cleaner. Jerry Reiges, Worcester, Mass. Filed Oct. 13, 1919.

1,367,293. Window-Mop. Victoria S. Brandes, Middletown, N. Y. Filed Dec. 31, 1919.

1,367,297. Wrench. Edwin W. Bullard, Whitneyville, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Aug. 13, 1920.

1,367,328. Skate. Edward Saundry, New Haven, Conn. Filed Sept. 8, 1920.

1,367,345. Toy Vehicle. Niles H. Anderson, North Easton, Mass. Filed Dec. 15, 1919.

1,367,351. Washing-Machine. Frank Brueggeman, Chicago, Ill., assignor of one-half to John R. Richards, Chicago, Ill. Filed May 29, 1920.

1,367,362. Pliers. Arthur Earnhart, Pondcreek, Okla. Filed March 15, 1920.

1,367,369. Flash-Light Support. Richard Nason Friend, Sioux City, Iowa. Filed March 6, 1918.

1,367,379. Sifter-Top Carton. Raoul J. Gruenberg, San Francisco, Calif. Filed Oct. 31, 1918.

1,367,380. Grass-Cutter. Philip J. Haas, Omaha, Nebr. Filed Sept. 6, 1918.

1,367,456. Adjustable Wrench. Charles W. Brown, Creston, N. C. Filed June 1, 1920.

1,367,457. Heating-Stove. William A. Campbell, Bellefontaine, Ohio. Filed Aug. 27, 1917.

1,367,484. Can-Opener. David K. Kirkland, Athens, Tex. Filed Nov. 1, 1918.

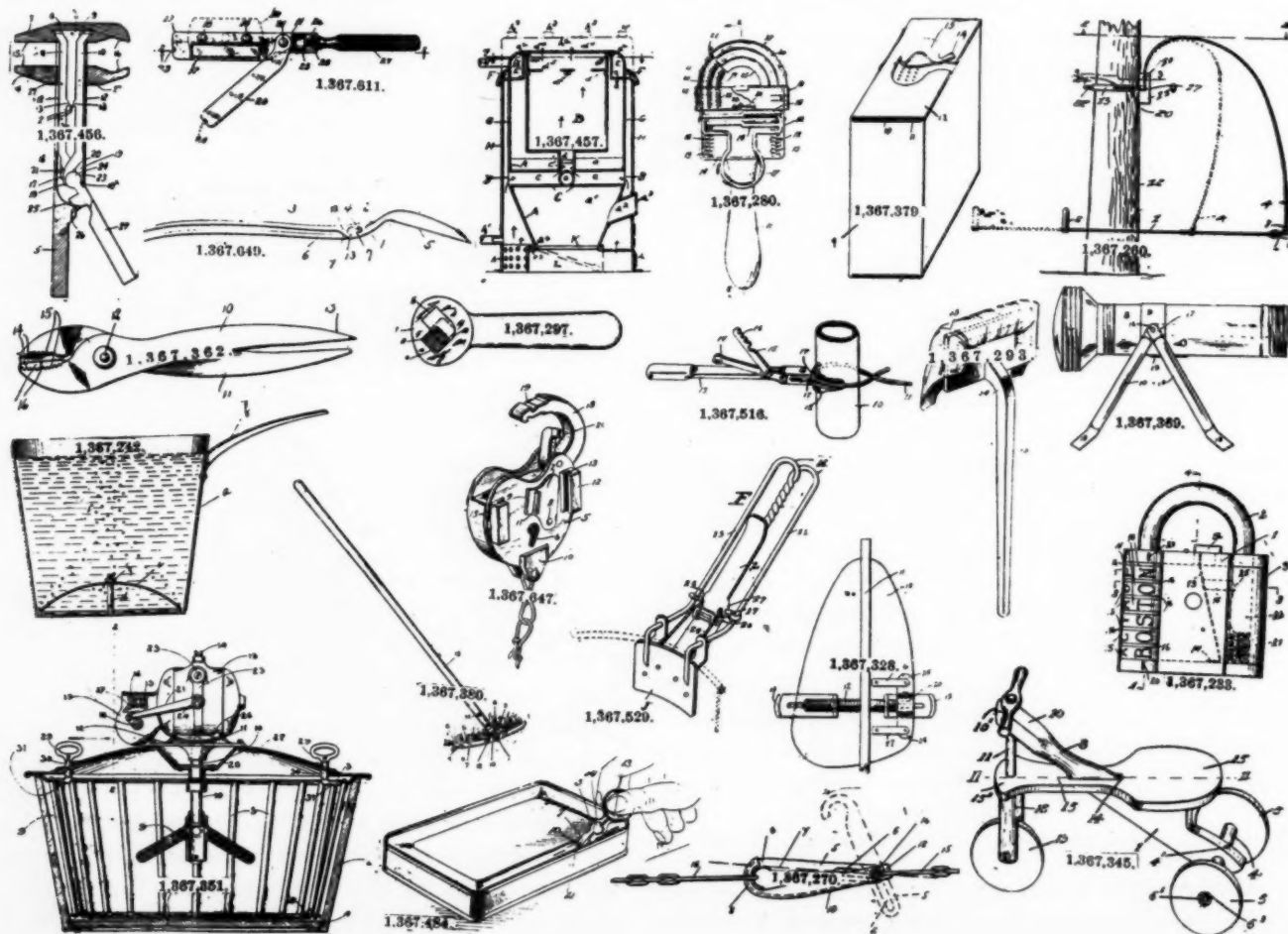
1,367,516. Wire-Fence Tool. Percy J. Hindmarsh, Lincoln, Nebr. Filed Sept. 23, 1919.

1,367,529. Lifter for Cooking Vessels. Harvey Lee Angus, Inverness, Mont. Filed Feb. 16, 1920.

1,367,611. Razor-Blade Holder. John J. Lochman, New York, N. Y. Filed May 8, 1919.

1,367,647. Sealed Padlock. Edwin C. Washburn, Englewood, N. J. Filed June 18, 1920.

1,367,649. Table Utensil. Joseph White, Middlesex, Borough, N. J., assignor to Minnie E. White, Middlesex, N. J. Filed Oct. 28, 1919.





# Illustrations of New Patents

*Watch This Page. Keep Yourself Informed Concerning Improved Devices Which May Save Labor in Your Shop or Add Another Source of Income to Your Retail Store.*

1,367,665. Safety Razor. Louis Kowitz, Lawrence, Mass. Filed November 6, 1919.

1,367,711. Pliers. Bennie Nortwed, Kellerton, Iowa. Filed August 20, 1919.

1,367,722. Carpet Sweeper Brush Cleaner and Stripper. Earle R. Smith, Los Angeles, Calif. Filed August 19, 1919.

1,367,728. Attachment for Liquid and Gaseous Burners. Henry L. Beach, Montrose, Pa. Filed October 23, 1919.

1,367,753. Broom Holder. Harry D. Neff, Cambridge, Mass., assignor to Re-Filit Broom Company, Boston, Mass., a Corporation of Massachusetts. Filed February 16, 1920.

1,367,876. Combined Vegetable Parer, Slicer, etc. Henry C. Heffner, Bradford, Pa. Filed January 3, 1917.

1,367,909. Safety Razor. John L. King, New York, N. Y., assignor to Rotary King Safety Razor Company, a Corporation of Delaware. Filed July 14, 1920.

1,368,007. Frying Pan. Henry W. Zimmermann and Anna E. Zimmermann, Cincinnati, Ohio, assignors to Badger Metal Ware Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 2, 1919.

1,367,041. Door Latch. John J. Malone, New Haven, Conn. Filed Apr. 28, 1920.

1,368,077. Metallic Snip. William W. Underwood, St. Louis, Mo. Filed Dec. 16, 1919.

1,368,085. Tool. William Womack, Emmett, Idaho. Filed Sept. 27, 1919, Serial No. 326,903. Renewed Jan. 3, 1921.

1,368,116. Safety Razor. Isidore Clair, Brooklyn N. Y. Filed June 11, 1919.

1,368,119. Tool Holder. Walter Cockcroft, Philadelphia, Pa. Filed Dec. 9, 1919.

1,368,247. Fly Swatter. Joseph Dir, Stuart, Iowa. Filed Mar. 12, 1920.

1,368,311. Nail Puller. Frank Williams, St. Louis, Mo., assignor of one-fourth to Fred Lutgers and one-half to Louis Burnis, St. Louis, Mo. Filed Apr. 14, 1920.

1,368,378. Clothespin. George W. Walker, Oakland, Calif. Filed Sept. 16, 1920.

1,368,380. Wrench. William B. Bandy, Crossville, Tenn., assignor of forty-nine one-hundredths to William H. Jackson, Crossville, Tenn. Filed Jan. 29, 1920.

1,368,388. Folding Auto and Camper's Stove. Zala A. Church and Walter E. Thomas, Jefferson, Iowa. Filed Aug. 25, 1919.

1,368,403. Knife Holder for Shapers. William M. Knourek, River Forest, Ill. Filed May 12, 1920.

1,368,405. Heating Stove. James McCann, Gage, Mont. Filed Feb. 11, 1919.

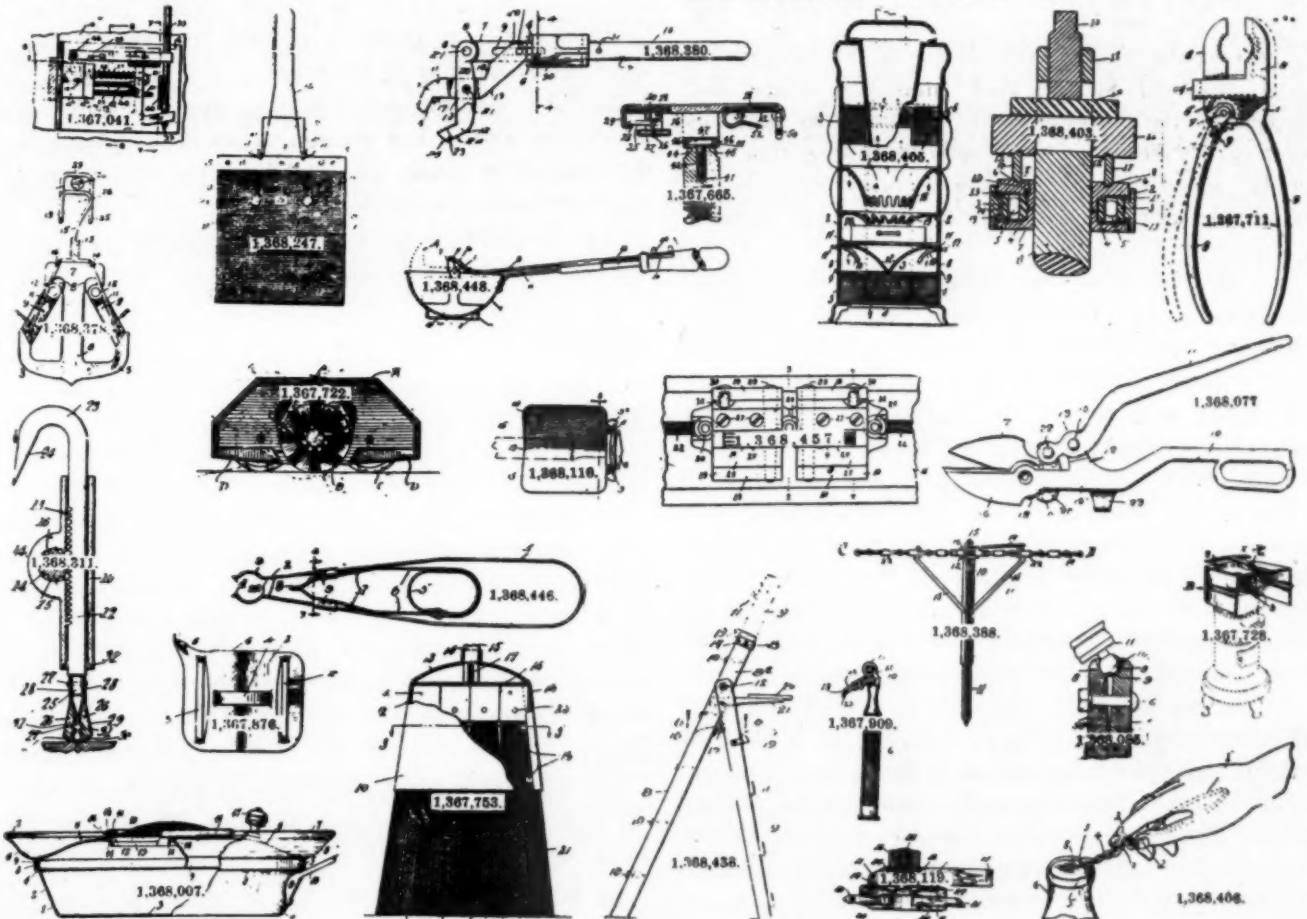
1,368,406. Opener for Milk Bottles and the Like. Robert McHardy, Toronto, Ontario, Canada. Filed Dec. 6, 1919.

1,368,438. Extensible Stepladder. Edward Jacob, Gary, Ind. Filed Jan. 8, 1919.

1,368,446. Valve Tool. Peter Madsen, Chicago, Ill., assignor to O. Jay Smith, Chicago, Ill. Filed Mar. 31, 1919.

1,368,448. Dipper Funnel. Frederick S. Minch, Columbus, Ohio. Filed Jan. 23, 1920.

1,368,457. Metal Cutting Tool. George A. Schipper, Aurora, Ind., assignor of one-half to George M. Stedman, Aurora, Ind. Original application filed Oct. 7, 1914. Divided and this application filed Feb. 20, 1918.



# Weekly Report of the Markets

*General Conditions in the Steel Industry. Review of Prices and Tendencies in Sheet Metals, Pig Iron, etc.*

## LEADING INTEREST ANNOUNCES PRICE REDUCTIONS.

The long-expected announcement by the United States Steel Corporation of a reduction of steel prices was made Tuesday, April 12th, by Judge Elbert H. Gary, chairman of the board.

The reduction affected almost the entire list of the finished and semi-finished steel products manufactured by the leading interest, which in point of volume makes up approximately 45 per cent of the country's entire output. The new prices are not as low as those quoted by the independents.

In making the announcement Judge Elbert H. Gary, chairman of the United States Steel Corporation, stated:

"After consultation with the presidents of subsidiary companies and careful consideration of the whole subject we have decided to substantially reduce the base selling prices of our commodities, f. o. b. Pittsburgh, to take effect April 13, 1921."

Following are the new prices compared to the old:

	New.	Old.
4x4 and heavier billets, per gross ton.....	\$37.00	\$47.00
Slabs, per gross ton .....	38.00	46.00
Sheet bars and small billets, per gross ton..	39.00	47.00
Bars, per 100 pounds.....	2.10	2.35
Plates and structural, per 100 pounds.....	2.20	2.65
	and 2.45	
Wire rods, per gross ton.....	48.00	57.00
Plain wire, base .....	3.00	3.25
Wire nails, per keg, base.....	3.25	3.25
Tin plate, per base box.....	6.25	7.00

The corporation has been selling at the schedule of prices proposed by the War Industries Board and adopted by the corporation in March, 1919, and has never varied from this level, notwithstanding that during the period of heavy buying in 1919 and 1920 the independents advanced their prices and reaped millions of dollars in extra profits.

Nor did the corporation depart from this schedule, when, late in 1920 and ever since, the business of the world has been thrown into a state of depression seldom paralleled in history.

It didn't have to cut because buyers deserted the independents but kept the order books of the leading interest filled as never before.

The flow of trade to the United States Steel Corporation was checked early in 1921, when the independents established prices much lower than those of the leading interest and the trade began to withhold specifications against its orders with the corporation in anticipation of the move made yesterday.

At the beginning of this year, the order books of the independent steel mills of this country were bare and the mills operating at about 25 per cent of capacity.

On the other hand, the order books of the United States Steel Corporation showed unfilled orders amounting to 9,285,441 tons and its mills were producing at a rate well over 90 per cent of capacity.

The loss in business since then through the reversal in ideas as to prices by its customers is best seen through the steady curtailment in operations at its mills, which today are running at approximately 35 per cent of capacity.

The amount of unfilled tonnage on the books of the corporation as of March 31 aggregated only 6,284,765 tons, and this tonnage is affected by the price reductions.

The recent move on the part of the independents to advance prices from their ruinous low levels to which they had been cut was made, it is believed in anticipation of a reduction by the leading interest, and with an idea to meeting it part way and establishing a single schedule of prices throughout the industry.

## Steel.

It is reported that independent steel interests in and around Chicago are following the lead of those in the Pittsburgh and Youngstown districts in advancing prices on a number of steel products.

Structural shapes and tank plates have been advanced in this region about \$2.58 per 100 pounds and soft steel bars \$2.48, while common iron and hard steel bars are unchanged.

An advance in the price of steel sheets is anticipated, but no announcement to this effect has as yet been made. The opinion that these advances were made in anticipation of a cut by the United States Steel Corporation and in an endeavor to meet its new schedule seems to be growing in the trade.

The idea seems to be that of a single schedule of prices that will be low enough to instill confidence in the consuming public and stabilize the market on a basis satisfactory to all concerned.

High production costs and low operating rate will not permit a lower scale of prices allowing of any profit at the present time.

## Copper.

Copper prices are unchanged and the one market on prompt still rules at 12¾ cents a pound. The domestic market in general continues dull and quiet with few small orders being placed from day to day.

The export trade is much better than the domestic and shipments are going forward in good volume, comparatively speaking, according to the daily returns made by the Customs House. Exports so far this month aggregate 9,843,360 pounds. Germany is the heaviest buyer and pays cash which is evidence enough of her speedy recovery.

## Tin.

For the past 30 years the average price for Straits tin was 34.06 cents a pound and today it is down to 29.50 cents.

In March it went as low as 28 cents which is the



lowest price recorded since 1909 when it touched 27.30 cents.

In 1914 the lowest level to which tin declined was 28.50 and the average price for the year was 35.70.

The average price in 1920 was 50.36, in 1919 it was 65.54 and during 1918 it was 86.80 cents a pound.

The visible supply throughout the world amounts to practically 16,000 tons and the Malay Straits government and the Dutch government hold more than 15,000 tons between them.

What stocks are in consumers hands is unknown but they must be very large. Large stocks are also held at the mines in Bolivia and by the refiners here.

If it were not for the speculative element prices would probably be much lower than they are today considering the lack of demand.

An already sensitive market would in all probability suffer considerable depression if any of the interests above mentioned were forced or decided to liquidate the stock.

### **Lead.**

Chicago prices of lead declined 10 points during the week. American pig lead was reduced from \$4.75 per hundred pounds to \$4.65, and bar lead from \$5.50 per hundred pounds to \$5.40.

Offerings in the outside market in the West by operators continue to be free, and buyers show little interest, but there is nothing reported at East St. Louis basis below the "official" figure of 4.25 cents.

Producers are not pressing for business and their stock position is better than a month or two ago, while some interests who are seldom off the market as sellers, profess to be oversold for some weeks to come.

### **Solder.**

A reduction of 50 cents per hundred pounds has occurred in Chicago prices of solder. The quotations now in effect are as follows: Warranted, 50-50, per hundred pounds, \$21.25; Commercial, 45-55, per hundred pounds, \$19.75; Plumbers', per hundred pounds, \$18.50.

### **Zinc.**

There were bids of 4.50 cents a pound in St. Louis yesterday, but producers were holding to the 4.65 cents price and 4.60 cents was considered a fair settling price. The nominal Chicago quotation was unchanged at 5.15 cents a pound in slabs.

Producers have exceptionally large stocks of ore in their bins in the Joplin district, but are holding on to it, barely selling 5,000 tons a week.

Several smelting companies would take considerable tonnage at the present market prices, not because they need it now but because they figure the bottom of the market has been reached and that higher prices will rule shortly.

The producers, however, refuse to let it go. High grade sulphide is now quoted at \$24.80; premium 60 per cent zinc, \$22.50; prime Western 60 per cent, \$22.50, and fines and slimes, \$20@21.

Joplin zinc ore shipments last week aggregated 5,397 tons, as against 5,572 tons the week previous, while shipments since the first of the year totaled 80,580 tons, as compared with 190,188 tons during the corresponding period last year.

### **Sheets.**

On the whole, the demand for sheets is even lighter than it was two or three weeks ago.

Much has been made of releases obtained from the automobile trade, but these do not keep up very well and in point of tonnage they never amounted to much, by comparison with the total sheet making capacity.

Jobbing demand for sheets is particularly light, the average jobber seeming to have difficulty in making up an order for even a single carload.

Operations by the independent sheet mills increased with some steadiness from the beginning of the year up to a short time ago, but now they seem to be on the down grade, and it is doubtful whether the average among the independents is much over 25 per cent. As to the leading interest, its operations have been downwards since the first of the year, and in the past two or three weeks the decrease has been rapid.

The reduction in steel prices announced this week by the leading interest will probably be applied to sheets next week.

For the present, therefore, the figures quoted in the Current Hardware and Metal Prices of AMERICAN ARTISAN AND HARDWARE RECORD are purely nominal.

### **Tin Plate.**

The new base price of tin plate quoted in the announcement of the United States Steel Corporation is placed at \$6.25 f. o. b. Pittsburgh. The old base was \$7.00.

This does not mean, of course, an immediate readjustment of warehouse quotations because it requires time to change existing forms with a view to equalizing the stock on hand with new purchases to be made at the reduced price.

### **Old Metals.**

Wholesale quotations in the Chicago district which should be considered as nominal are as follows: Old steel axles, \$14.00 to \$14.50; old iron axles, \$24.00 to \$25.00; steel springs, \$12.00 to \$12.50; No. 1 wrought iron, \$10.50 to \$11.00; No. 1 cash, \$14.00 to \$14.50; all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 7 cents; light brass, 4 cents; lead, 3 cents; zinc, 2 cents; cast aluminum, 10 cents.

### **Pig Iron.**

In a few exceptional instances large consumers of foundry iron in the eastern district have bought a little more metal. One concern placed a contract for about 3,500 tons of foundry grades with the agent of a Buffalo furnace for shipment over the next few months. Another eastern Pennsylvania producer has taken recent orders for an aggregate of about 1,000 tons, but most of the sales continue to be for small lots and for early shipment. The tone of the market is still heavy and there is small prospect of any sustained buying.

There is a distinct feeling of encouragement in the iron trade as a result of the action of the United States Steel Corporation in reducing prices.

It is generally believed that this action will have a favorable effect in hastening the general stabilizing of industry.

# Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS	HARDWARE	Scratch.	BEVELS, TEE.
<b>PIG IRON.</b>	<b>ADZES.</b>	No. 18, socket Handled .....per doz. \$ 2 50	Stanley's Rosewood handle, new list .....Net
Northern Fdy. No. 2.....\$25 70	Carpenters'.	No. 344 Goodell- Pratt, list less.....35-40%	Stanley Iron handle.....Net
Southern Fdy. No. 2..... 33 17	Plumbs.....Per doz. \$29 00	No. 7 Stanley...per doz. \$ 2 25	
Lake Sup. Charcoal..... 33 50	<b>COOPERS'.</b>		<b>BINDING CLOTH.</b>
Malleable ..... 27 20	Barton's .....Net		Zinced .....55%
	White's .....Net		Brass .....40%
			Brass, plated.....60%
<b>FIRST QUALITY BRIGHT TIN PLATES.</b>	<b>Railroad.</b>	<b>AXES.</b>	<b>BITS.</b>
	Plumbs.....Per doz. \$30 00	First Quality, Single Bitted, 3 to 4 lb., per doz. 16 50	Auger.
		First Quality Double Bitted .....per doz. 22 50	Jennings Pattern.....Net
			Ford Car.....List plus 5%
			Ford's Ship..... " 5%
			Irwin .....35%
			Russell Jennings.....plus 20%
			Clark's Expansive.....33 1/4%
			Steer's " Small list, \$23 00..5%
			" " Large " \$26 00..5%
			Irwin Car.....35%
			Ford's Ship Auger pattern Car .....List plus 5%
			Center .....10%
			<b>COUNTERSINK.</b>
			No. 18 Wheeler's...per doz. \$1 25
			No. 20 " " " 2 00
			American Snailhead " 1 75
			" Rose " 2 00
			" Flat " 1 40
			Mahew's Flat " 1 60
			" Snail " 1 90
			<b>DOWEL.</b>
			Russell Jennings.....plus 20%
			<b>GLIMLET.</b>
			Standard Double Cut Gross \$2 40
			Nail Metal Single Cut .....Gross \$4 00—\$5 00
			<b>REAMER.</b>
			Standard Square.....Dox. \$2 50
			American Octagon... " 2 50
			<b>SCREW DRIVER.</b>
			No. 1 Common..... 30
			No. 26 Stanley..... 75
			<b>BLADES, SAW.</b>
			<b>WOOD.</b>
			Disston 30-in. Nos. ....6 66 24
			\$9 45 \$10 05 \$9 45
			<b>BLOCKS.</b>
			Wooden .....20%
			Patent .....20%
			<b>BOARDS.</b>
			<b>STOVE.</b>
			24x24 .....Per doz. \$13 65
			26x26 ..... 16 05
			28x28 ..... 18 85
			30x30 ..... 21 30
			32x32 ..... 25 50
			36x36 ..... 30 50
			<b>WASH.</b>
			No. 760, Banner Globe (single) .....per doz. \$5 25
			No. 652, Banner Globe (single) .....per doz. 6 75
			No. 801, Brass King, per doz. 8 25
			No. 860, Single—Plain Pump ..... 6 25
			<b>BOLTS.</b>
			<b>CARRIAGE, MACHINE, ETC.</b>
			Carriage, cut thread, 1/4x6 and sizes smaller and shorter .....40-10%
			Carriage sizes larger and longer than 1/4x6.....40-5%
			Machine, 1/4x4 and sizes smaller and shorter...50-10%
			Machine, sizes larger and longer than 1/4x4.....50%
			Stove .....65-10%
			Tire .....50%
			<b>MORTISE, DOOR.</b>
			Gem, Iron.....5%
			Gem, bronze plated.....5%